Lectures
ON
OPERATIVE OPHTHALMIC SURGERY.

Delivered at St. George's Hospital.

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LECTURE I.—PART II.

You see here, gentlemen, a contrivance intended to facilitate the acquirement of dexterity. It is a mask representing the human face, and set upon a jointed pedestal capable of being fixed at any angle, so as to render the plane of the face vertical, horizontal, or inclined. Behind holes corresponding to the orbital openings there are spring clips, capable of holding artificial eyes or the eyes of animals, and fixed to spiral springs, so that the inserted eyes obtain somewhat of the natural mobility. By the aid of this mask I shall be able to demonstrate many of the points to which I have to call your attention, and upon it you will be able to practise operating at your leisure.

Before the mask is used there is, however, a great deal to be accomplished by the aid of simpler means. I once met with some very good instructions for persons wishing to learn the use of the sewing machine; and the writer laid great stress upon the necessity of acquiring complete mastery of the treadle before the manual part of the work was even commenced. He asserted the sound principle that the power to accomplish a complex mechanical procedure should be obtained piecemeal; the eventual combination of different movements being far more easy than their simultaneous acquisition. On this principle, the first thing to be done, as a preliminary to operations upon the eye, is the practice of equal and consentaneous movements of both hands. Free drawing with both hands at once is perhaps the best exercise for the purpose. The paper should be placed on a desk, conveniently sloping so as to support the hands, and then two similar curves should be drawn simultaneously, so as to meet in, or to proceed from, the same point. Two pencils should at first be used, and it will be found that several difficulties have to be overcome. The left hand will lag behind the right, and will move with less freedom, so as to form a smaller curve, and to form it more slowly. When simultaneous and similar movement is at last obtained, there will still be differences in the amount of pressure exerted; and these differences may be rendered visible by substituting pens for pencils, so that the degree of pressure will determine the thickness of the line. To such exercises as these, many of the otherwise wasted intervals of leisure may be profitably devoted, and with the result that in no long time the two hands will be combined by the volition and intelligence into one machine, made up, indeed, of essentially independent parts, but still capable of equal and harmonious action. It may safely be laid down that the superiority of the right hand over the left, for the purposes of fine manipulation, is almost entirely due to the cultivation of the muscles of the former by the practice of writing and drawing; and drawing with the left hand may be cultivated indefinitely, and with much surgical advantage.*

There is one instrument only which requires, when used by the left hand, a special form of manipulation. Ordinary scissors are so made that the natural opponency of the right thumb and medius brings their edges into apposition, while the left thumb and medius tend rather to separate them. When taken in the left hand, the thumb should pass through the upper loop, and the ring finger through the lower, as shown in the subjoined illustration (Fig. 1). The medius should rest in front of the lower loop, and in firm contact with it, and the point of the index against

FIG. 1.

the lower blade, a little in front of the joint, and should there make pressure. Thus held, scissors will cut to the points as well in the left hand as in the right. For excising a portion of the iris, it is generally possible to use the right hand for scissors with either eye; but for strabismus operations on the left eye, and for removing skin from the left eyelids, the mastery of scissors with the left hand, if not essential, is at least conducive to neatness and despatch. In a subsequent lecture I shall have to show you some new scissors, recently patented by Messrs. Weiss, which are equally convenient for either hand.

When the hands have become accustomed to work together, and with equal speed and force, by means of the drawing exercises, the mask may next be taken into use. At first the orbital hollows may be left vacant, while the learner practises holding the knives and needles required. The instrument should be held like a pen, in the thumb and first two fingers, while the remaining fingers and a portion of the ulnar margin of the hand rest upon the brow; and the position should be such that the fulcrum need never be shifted, and that all necessary movements may be performed by the simple flexion or extension of the grasping fingers. In this way the operator should be able to touch either the temporal or nasal margin of the orbital opening; and to execute any sawing movement within these limits. Next, the orbital hollows may be filled with something to represent eyes. Small wooden balls, covered with white leather, on which a circle is drawn to represent the corneal margin, are very convenient to begin with. The leather covering may be seized by fixation forceps, and the operator may proceed to mark the corneal margin by minute dots placed at close and regular intervals. If he use a fine pen, he will produce a permanent record of his power to place the point of an instrument precisely upon a selected spot; and he may next proceed to connect two dots together by a drawn line. After a while hollow balls of soft india-rubber may be substituted for the wooden ones, marked in a similar manner, and used to practise the art of puncturing or incising the eyeball with the proper degree of force, and in any required direction. The eyes of recently killed animals will come next in order, and upon them all the steps of the principal operations may be performed. The best eyes are those of pigs, cats, and rabbits; the two latter being especially well adapted for operations upon the iris. The animals should be killed by some means that does not produce extreme dilatation of the pupil.

It has been well said, gentlemen, that what common people call genius is little more than a great capacity for taking trouble. I have recommended you to take a great deal of trouble in order thoroughly to accustom yourselves to the manipulations of ophthalmic surgery; and if you follow my advice I am sure you will find the time well spent. You will come to the real work as skilful craftsmen, and not as awkward and blundering novices. It has more than once been my lot to see attempts to operate upon the human eye, upon the eye of a trusting patient, by a person who did not know how to handle the implements he was

* It is not generally known that the difficulty of *writing* with the left hand depends almost entirely on the direction of the movement from left to right, and on the customary slope of the letters. It is perfectly easy to write with the left hand the *reverse way*—i.e., to execute with the left hand a movement analogous to that which we constantly execute with the right. Any person who is temporarily deprived of the right hand may conduct correspondence by writing with a style with the left hand, the reverse way, on thin paper, with carbonic paper underneath. The sheet must then be turned over to be read, and the words will run in the ordinary fashion.

about to misuse; and I can conceive few things more painful than such a spectacle, unless it be the reflections suggested by the inevitable consequences of the so-called operation. Let me remind you, moreover, that the results of your early eye operations will have a very marked effect upon your future success, either as general practitioners or as specialists. If circumstances should lead you into rural districts, and you find there, as you well may, old people whom you are able to cure of blindness by the extraction of cataract, your work will command immediate and wondering appreciation, while if you condemn these same old people only to pain and disappointment, you will be inevitably and most deservedly distrusted. If your lot in life should be to undertake hospital duty, the early possession of manual dexterity, and of the well-founded self-reliance that it entails, will be the surest passport to the confidence of your colleagues and *confrères*.

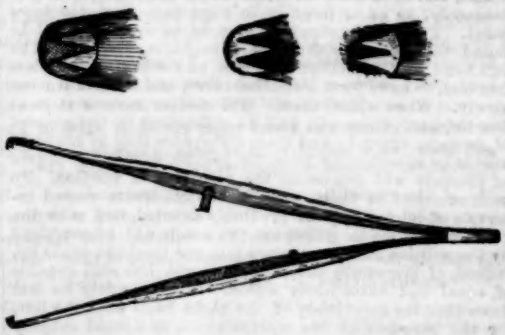
I pass next to the consideration of instruments, of which, as I have said, there exists an almost bewildering variety. I think it is Charrière, of Paris, who has formed a sort of museum of forgotten eye instruments, and I am afraid to say how many specimens it contains. But the instruments now living, so to speak, and familiar to us, may be divided into two great classes: the essential, which are the representatives of inventive ingenuity, and the superfluous, which are the representatives of inventive awkwardness. The former class are contrived by good mechanicians, the latter by bad surgeons. There are certain things for which the fingers cannot be spared, or which they cannot do, and for these things instruments are essential. The fingers cannot be spared to hold open the eyelids; and, therefore, as the fingers of an assistant would be in the way, specula are essential. The fingers cannot fix the eyeball without exerting dangerous pressure, and therefore fixation forceps are essential. The uses of iris forceps, of hooks, of scissors, of cutting blades of different sizes and shapes, require no demonstration; and all these must be adapted to the work that they are required to perform. But in all ages and countries it is the bad workman who complains of his tools, and it is the good workman who produces the most varied results by the most simple means. A man who is very awkward, and whose awkwardness is perpetually bringing him to grief, hits upon a contrivance by which he hopes that that natural result may in some degree be obviated. He calls this contrivance an invention; and, like those persons of whom the Apostle tells us that they glory in their shame, he is often not a little proud of it. I have lately seen a description and drawing of a curiously deformed strabismus hook; with a claim that the deformity would cause it to hold the tendon securely, and without slipping. The inventor had not learned how to hold a common strabismus hook, or he would never have felt the need for his new fangle. Many surgeons of great and deserved repute have invented each a single instrument, such as Beer's knife or Tyrrel's hook; and some have invented more than one, chiefly because they have struck out some new procedure, for which new appliances were indispensable. But, as a rule, the invention of instruments by a surgeon is an irrefragable proof of his clumsiness; and when you find that any single operator has his peculiar scissors, and his peculiar hook, and his peculiar forceps, and his peculiar scoop, all called after his name, the best advice I can give you is to take care that he is never asked to operate upon your own eyes, or upon the eyes of any in whom you feel a personal or especial interest. Go rather to the man who has never invented an instrument in his life, but whose daily practice affords proof that he can use those invented for him by others.

In this introductory or general lecture, only the instruments common to nearly all operations, the specula and the fixation forceps, need to be described. The others will find their place when I have to speak of their respective uses. The speculum should possess two essential qualities. It should hold the lids quite away from contact with the eyeball, so that no spasmodic action of the orbicularis can exert injurious pressure, and it should be perfectly out of the way of the operator. I only know one form of instrument in which these desiderata are combined; and that, which is shown in the annexed woodcut (Fig. 2), is the invention of Mr. Foveaux, of the firm of Weiss and Sons. Its cross bar and screw-stop are too near the eye to allow of the parts in front of them being bent or closed by muscular exertion, and the curve removes the bar quite out of the way of the handles of instruments. The speculum is reversible, and may be used for either eye. It must be introduced gently, when nearly closed, and must then be opened so as to put the lids fully upon the stretch, and to carry them away from the eyeball towards the margins of the orbit. It is next fixed by a turn of the screw, and, when released prior to removal, it must be prevented from closing suddenly.

FIG. 2.

Fixation forceps are of two kinds: those which seize the conjunctiva and subconjunctival tissue, and those which penetrate the sclerotic. The former present a blunt extremity when closed, and one blade has two little teeth, which are received between three corresponding teeth of the other. The figure (3) shows the entire instrument, and the points, both open and closed, in somewhat larger size. Such forceps hold well in young and healthy eyes.

FIG. 3.



But in the aged, and after prolonged inflammation, the conjunctival tissues often tear with extreme readiness, and the forceps not only produce troublesome lacerations, but may lose their hold at a critical time of the operation. To meet this difficulty the perforating forceps were contrived, at about the same time, by Mr. Bader, of Guy's Hospital, and by M. David, of Angers. Each blade terminates in a single fine sharp point, and the two points cross to the extent of a line, as shown in Fig. 4. In use, the forceps are closed until the points are about a line apart. These points are then placed on the sclerotic, *immediately* external to the corneal

FIG. 4.

margin, and are driven in and closed by a simultaneous movement. They then hold the eye with a grasp which never gives way. They seldom perforate the anterior chamber; but their doing so would be quite unimportant, as they fill their own punctures until they are removed. I have never seen these punctures become the seat of any irritation, or give the smallest subsequent trouble, and my own practice is always to use the perforating forceps in order to incise the eyeball, but to lay them aside for the others in the subsequent steps of an operation; on the ground that the pressure required to give them their hold might do mischief, by starting the lens or vitreous body, when once the support of the aqueous humour was withdrawn. I have seen surgeons attempt to use these forceps by pinching up a fold of conjunctiva between their points; but in this way their action is very unsatisfactory, and I quote the example rather for avoidance than for imitation. The conjunctival fixation forceps may also be used in a right way and in a wrong. They should be held directed towards the centre of the eyeball, placed, a little open, upon the conjunctiva near the cornea, and closed while making gentle pressure upon the globe. They will in this way lift up a fold which contains not only the delicate conjunctiva, but also the tougher subjacent tissue; and the extremity of the closed forceps should be kept in gentle contact with the globe while traction is being made. If only a fold of conjunctiva is pinched up, and if that fold is lifted off the sclerotic, the membrane will probably tear, and the position of the eyeball will be very insufficiently controlled.

In my next lecture I shall first discuss the employment of anæsthetics in ophthalmic surgery; and shall then proceed to the consideration of the operations for cataract.

NOTES OF VISITS TO FOREIGN BATHS.

By JOHN MACPHERSON, M.A., M.D.

III.—WESTPHALIA.

Few things have surprised me more than the popularity of Lippspringe—no doubt only for a special class of patients. The village, a sort of improved country *dorf*, lies in an open plain. There are very fair lodging-houses, and a large Kurhaus Hotel, bathing cabinets, and a piece of ground nicely enough laid out with trees; but the whole country round is flat, uninteresting, and without shade. Yet more than fifteen hundred *poitrinaires*, as the French call them, come here every summer, and they have no fewer than eight doctors to look after them. The temperature of the water is 70°, and it contains about seven grains of salts of lime and about as much of salts of soda; there is also a good deal of nitrogen gas present. The inhalation of that gas is one of the specialities of Lippspringe; but whether it is in any respect more efficacious than the inhalation of ordinary moist air, seems doubtful. The inhalation is managed by making the water fall on a cone of twigs of thorn, which mechanically divides it, much after the fashion of the faggots of the *gradir häuser*; and round these the patients sit.

According to Dr. Rohden, the cases that have benefited here have been simple pulmonary catarrhs, with or without much hæmoptysis, which probably indicated phthisis. These after a longer or shorter time were quieted, and the cure carried out by life in the open air and in the mountains. Caseous deposits after chronic or acute catarrhal pneumonia were sometimes treated, with good results. Still more successful was the treatment of old pleuritic exudations, if they were not very old. Various cases of capillary bronchitis that had resisted very different modes of treatment were cured in a wonderfully short time. Others have written more confidently of the effects of the *lungen gymnastick* of inhalation, and have considered that in cases in which tuberculosis had not made any great progress the capacity of the lungs was increased from fifty to seventy inches by the use of the cure for some weeks; even in advanced cases with cavities advantageous results have been found. The waters are used for drinking, for bathing, and for inhalation. In former times the Lippspringe waters were mostly used in baths; now they are more frequently employed for inhalation. I had a conversation with Dr. Rohden, who seemed a very sensible and intelligent man. He did not talk of extravagant success, but said it was an undoubted fact that the sort of cases enumerated above did improve wonderfully; and he attributed the result to the soft and somewhat moist air of Lippspringe, the quiet of the life there, its good arrangements, and the unfailing attention of the doctors. Dr. Rohden has observed very carefully the effects of meteorological changes on his patients, and he thinks that he has traced a connexion between attacks of hæmoptysis and a fall of the barometer coinciding with suddenly increased amount of moisture in the atmosphere. Perhaps the influence of meteorological conditions on disease—a subject still very partially investigated—is most strikingly illustrated by the increased mortality of delirium tremens in very hot weather, which I believe I was the first to point out. The visitors of Lippspringe were evidently no *malades imaginaires*, and many of them had their disease stamped on their countenances. Lippspringe is about five miles from Paderborn, on the railway. This place boasts of its Inselbad, essentially the same and used for the same purposes as Lippspringe. I had not time to visit it, nor a very favourite quiet bath in this district in a very pretty neighbourhood—Meinberg, with its three sulphur springs and one iron well.

If there be difficulty in ascertaining to what the good effects obtained at a place like Lippspringe are to be attributed, there is none in assigning a cause for the popularity of the next two places which I visited—Driburg and Pyrmont,—namely, plenty of iron and carbonic acid, and an agreeable neighbourhood.

Driburg is a short way from Paderborn by railway. It lies in a pretty open valley, with nicely wooded hills in the neighbourhood; it has good shady avenues, and a park very prettily laid out. The lodgings in the kurhaus are roomy, and the arrangements much better than I had expected, as I was told that I should find them very rough. In the centre building is the drinking well; in the left the water is heated for bathing; and to the right are mud baths. The waters are quite sufficiently strong of iron, having nearly ·6 of a grain in the 16 oz. They have a sufficient supply of carbonic acid; but they have more earthy salts than are wanted—nearly 15 grs. of carbonate, and 10 grs. of sulphate, of lime. They have also nearly 8 grs. of sulphate of soda, and nearly 5 grs. of sulphate of magnesia. It is therefore not surprising that the waters are not so pleasant to the taste nor so well borne by the stomach as those of Schwalbach. They are not, however, exactly unpleasant. They are very slightly aperient. I need not enter into the cases for which such waters are best fitted; suffice it to say that, as in all steel baths, the greatest number of the patients appeared to be ladies. They have their favourite steel baths—i.e., baths of carbonated water—here as at more fashionable chalybeate spas.

I went on by rail from Driburg to Hurter, and then went by coach in about four hours to Pyrmont, which is most conveniently reached in this way, although it is hoped that the railway to it, long in progress, may be soon finished.

Pyrmont was long one of the chief baths of Europe frequented by princes and crowned heads; and it retains its ancient glory of appearance, for I know no baths with such a magnificent avenue, or so beautiful a park, or with such fine timber. It has an immense number of chalybeates, many of which are shut up. The two principal ones for drinking are the Trinkbrunnen and the Helenen. The first contains ·42 gr. of carbonate of iron. It has about 18 grs. of solid constituents, or about 7 grs. more than the Weinbrunnen at Schwalbach; but of these, 4 grs. are sulphate of magnesia, which helps to make the water faintly laxative. The Weinbrunnen is pleasant to the taste; but the Helenen is perfectly delicious. It contains ·2 gr. of iron, about as much as the strongest well at St. Moritz, and is therefore well adapted for cases in which it is not desirable to commence with the stronger springs. The bathing arrangements are admirable. There is such an enormous supply of gas and water that the baths are much larger here than at Schwalbach, just as they are larger at Schwalbach than at St. Moritz. There are all the fitting arrangements for uterine douches and for local applications. Pyrmont also boasts of salt springs for bathing, and an excellent one for drinking,

owing to the presence of abundance of carbonic acid far pleasanter than the Elisen well at Kreuznach. Pyrmont has also a pleasant acidulous spring. This bath is, therefore, very rich in what it has to offer to its patients. All the effects of the best chalybeates and of the best salt waters can be obtained here, which is obviously a matter of much convenience when members of the same family need various modes of treatment. The place is on a much larger scale and not shut in like Schwalbach, which in hot weather is very oppressive.

Pyrmont is largely visited from the north of Europe, but very few English resort to it, as they did in former days. This is a mistake. All the affections of women are treated here at least as well as at Schwalbach, and there are no better waters for anæmic and various nervous conditions. Although there has been long a gambling-table here, Pyrmont is, as Hofrath Lynker remarked to me, "kein luxus bad"; yet those who come here may have sufficiency of amusement and of relaxation. There is no necessity for particularising the large variety of cases that may profit by Pyrmont, nor for recounting its sights, including the gas cave. I may mention that the spring last found here was discovered owing to one of the trees of the avenue not thriving, and that most of the drinking-water has a slightly acidulous taste, caused by the immense quantity of carbonic acid constantly issuing from the soil.

To compare some well-known springs, it may be said that, according to the latest analysis of Fresenius, the Trinkquelle of Driburg contains ·409, the same of Pyrmont ·429, the Weinbrunnen of Schwalbach ·319, while its Stahlbrunnen has ·459.

Most of the physicians of Pyrmont give board and lodging to patients. The lodgings here are excellent; the hotels generally not quite so good as might be wished.

I visited Rehme Oeynhausen on a rainy day, and did not see Dr. Braun. Everything is being done to bring this place into favour with the North of Germany, as a rival to Kreuznach and Nauheim. The buildings are handsome and well arranged. The salt waters, which are well charged with carbonic acid, are chiefly used in baths. The drinking spring is quite secondary; in fact, the want of a good drinking well is a great defect. The trees are growing, the country round is pleasant without being picturesque, and the place appeared to have been crowded this season. Everything is effected here that the intelligent use of salt water can produce.

Although near the railway, I had not time to visit two quiet little sulphur-baths in high favour with the Hanoverians, Eilsen and Nenndorf. I heard the arrangements of the last very much praised. Rehburg, in a wooded, sheltered valley, with shady walks and a mild climate, is popular for its earthy wells and pine extract baths, but above all for its whey cure.

THE ACTION AND USE OF ANTISEPTICS IN SURGICAL PRACTICE.

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THAT antiseptics are of much value in surgical practice there can be little doubt; but that the theory of their action advanced by Mr. Lister and his followers is the true one admits of much doubt; and, as many surgeons who adopt the practice ignore the theory, I propose to consider whether a simpler and more satisfactory explanation cannot be given, based on chemical and clinical experience.

The chemical properties of carbolic acid have been so carefully investigated by Mr. Crookes, Dr. Sansom, and others, and are so well known to the profession, that it is unnecessary to detail the experiments on which my observations are based. It is sufficient to state that this substance has a very powerful affinity for albumen, but a very slight affinity for other bodies. Thus, if carbolic acid be added to a decomposing animal fluid, it will combine with the protein substances and arrest their further decomposition, but will not act upon—in other words, destroy—the gaseous and liquid products of decomposition already existing in the fluid. This is not equally true of other antiseptics (as the chlorides of zinc, mercury, alum, sodium, &c.), many of which have more extensive chemical relations, and not only retard decomposition, but destroy its various noxious products.

Carbolic acid, in common with many hydrocarbons and metallic salts, possesses the property of precipitating albumen from its solutions; but it would appear that this power of coagulation does not explain its antiseptic action, for albumen coagulated by heat, though it resists decomposition much longer than fluid albumen, does not so effectually do so as when precipitated by an antiseptic. Whether the precipitate is a true chemical compound or a mechanical mixture of the substances I am not able to say; but it has been urged in favour of the latter view that, when albumen which has been precipitated by carbolic acid is exposed to the air, the acid separates in the form of vapour, unchanged in its chemical properties. Little importance, however, need be attached to this fact, as the elements of many true chemical compounds separate spontaneously on exposure to the air. When very dilute solutions of carbolic acid and albumen are mixed together, the precipitate is either very scanty or appears to consist of the acid alone; but this arises from the relative proportions of the two substances, and it is quite immaterial whether we say the acid precipitates the albumen or the albumen the acid. This is a matter of little importance in actual practice, as the albumen is always in a concentrated form.

Time is an important element in the healing of wounds, and any agent which will simply coagulate the secretions, and so retard their decomposition for a few days, will be as useful an antiseptic as the more pronounced ones to which I have just referred.

What Hahnemann has done for the medical, Dr. Humphry has done for the surgical branch of the profession. By recommending that surgical operations should be treated without surgical dressings of any kind, he has given us an opportunity of studying their clinical history, and of comparing the relative merits of the various kinds of dressings employed by different surgeons. Dr. Humphry's practice was extensively and successfully tried by the late Mr. Keyworth, of York, at the York County Hospital, when I was house-surgeon to the institution, and I had ample opportunities of watching the progress of many operations throughout their course. I will give a summary of my observations in order more distinctly to explain the action of antiseptic dressings.

However carefully an operation may be performed, the instruments necessarily produce a certain amount of bruising and suspension of vitality or even death of the soft parts. The bloodvessels are blocked with coagula, lymph and blood are effused on the surface of the wound, and serum oozes from it for some hours after the operation is completed. Under favourable circumstances the bruised tissues recover their vitality, the serum and blood, if they have not escaped, become absorbed, the lymph becomes organised, and the wound heals. But if the wound is large, and this kind of union does not take place (and antiseptics have not been applied), at the expiration of from two to three days the injured structures and effused fluids begin to decompose. The first step in this downward progress is one of oxidation. The fluids, which when first effused were alkaline, become acid by absorbing oxygen from the air, and, when free from the vital action of the surrounding parts, new chemical combinations rapidly follow. Numerous nitrogen and hydrogen compounds are given off in the gaseous form, while the solid and fluid débris consists of fatty acids, leucin, tyrosin, lactic acid, sulphide of ammonium, and other salts. Some of these substances are poisonous (especially the sulphides), and irritate the surface of the wound, causing inflammation and unhealthy suppuration, or are absorbed into the system, and give rise to fever, erysipelas, and pyæmia. Concurrently with these chemical changes various vital organisms appear, which are probably adventitious, but according to Mr. Lister are the cause of the chemical decompositions. Finally, if by judicious surgical treatment the various poisonous products are removed, granulations form, and the wound heals by cicatrisation.

Thus a wound which does not heal by first intention passes through three stages—(1) the fresh wound, (2) the stage of decomposition, and (3) that of granulation and cicatrisation.

When simple dressings are employed—water dressings, ointments, bandages, &c.—the decomposition of the secre-

tions commences earlier, the suppuration is more profuse, and the healing more protracted. This is due no doubt to the increased heat and moisture produced by the dressings. Meat is preserved for a much longer time when exposed to a current of air than when kept in a close, stagnant, damp atmosphere. Wounds heal most speedily in a dry atmosphere, as Dr. Richardson has shown was the case in Egypt.

There are numerous reasons why wounds fail to heal by first intention—as the great extent of the wound, the bruising and destruction of the soft parts, the amount of effused blood and serum between the surfaces, and the rapidity with which the latter and the injured tissues undergo decomposition. When antiseptics are applied to a fresh wound they combine with, or coagulate, the albuminous secretions and tissues, and fix them like a mordant, so to speak, till the vessels have time to recover their tone, and either produce absorption or organise them into living tissues. Thus antiseptics are of the greatest value, for, by postponing the second stage—namely, that of decomposition—for three or four days they give more time for the wound to heal, and any substance which will coagulate albumen will be as efficacious as carbolic acid for this purpose. The employment of heat and of various alcoholic preparations (tincture of benzoin, tincture of aloes, &c.) by veterinary surgeons; of nitrate of silver, sulphate of copper, &c., by surgeons; and the chloride of zinc by Mr. De Morgan, is to be explained in this manner, and not by the destructive action on organic germs which they possess.

If a wound has failed to heal after the employment of antiseptics, and the putrefactive stage is fairly established, we have not only chemical but pathological processes to deal with, and much more than antiseptic treatment is required. It is not enough to suspend the decomposition going on in the wound, but we must also disinfect it of its poisons; and for this purpose carbolic acid is useless, for it exerts no power over the products of putrefaction, and is itself a poisonous and irritating application. For simple disinfection of a wound nothing is so admirable as Condy's fluid, but its action is so temporary that it requires constant renewal. Solutions of chloride of zinc answer the double purpose of an antiseptic and disinfectant, and are not so irritating or poisonous as carbolic acid. But the treatment of a wound in this stage will necessarily depend more on the skill and judgment of the surgeon than on the virtues of any one application.

For a granulating wound antiseptics (as such) are not only unnecessary but injurious. If the secretions decompose, the products will not be absorbed, and they can be washed away by water and Condy's fluid, and other local applications can only be beneficial as they influence the health of the granulations. Mr. Lister has shown that carbolic acid acts injuriously on young epithelium, and yet many of his disciples continue to apply it to wounds in every stage of their progress, and so retard the healing process.

The practical conclusions I draw from a consideration of this subject are the following:—Wounds do better when freely exposed to the air than when dressed with warm, moist dressings—as simple water-dressings, poultices, or ointments. For fresh wounds, antiseptics are of great value; the solutions of the chloride of zinc are to be preferred to those of carbolic acid, as they are fixed, easily applied, and require no dressings; whereas carbolic acid, being volatile, requires a complicated system of dressings, and is, moreover, poisonous, and sometimes produces disagreeable, if not dangerous, constitutional symptoms. For a putrefying wound, the dressings should be disinfectant as well as antiseptic, and the solutions of chloride of zinc are to be preferred as they possess both these properties. For a granulating wound, antiseptic applications are useless and often injurious, and disinfectants are rarely necessary.

I have intentionally avoided entering into the merits or demerits of the germ-theory of putrefaction, as, for practical purposes, it is not of the least importance whether we exclude the organic or the chemical and physical elements of the atmosphere, or render the tissues and secretions invulnerable to their attacks. Carbolic acid, being volatile, does no doubt destroy organic germs floating in the air, but it also renders the albuminous fluids unfit for their development; and as chloride of zinc and other non-volatile substances possess this latter property and not the former it is reasonable to conclude that the explanation I have given is probably the true one of the action of antiseptics in surgical practice.

The antiseptic system of treating wounds has been associated with the name of Mr. Lister; but the credit of its introduction is due to Mr. De Morgan and Dr. Humphry, and Mr. Lister's complicated practice has retarded rather than advanced its development.

Belton-row, Mayfair, 1871.

THE CASE OF ARTHUR O'CONNOR.

By HARRINGTON TUKE, M.D.

In the year 1852 I was requested by a Committee of the House of Commons, at the instance of my late kind friend Jacob Bell, to visit Feargus O'Connor, the Member for Nottingham, then a prisoner in the custody of the Sergeant-at-Arms. I found Mr. Feargus O'Connor was suffering under hopeless organic disease of the brain. He died in 1855, and during nearly all that time was under my care. I thus became well acquainted with his family, and especially with his nephew, Mr. George O'Connor, who, although entirely opposed to his uncle's political views, was most kind and attentive to him during his illness.

On the 7th of March, 1872, Mr. George O'Connor was announced in my consulting-room. Directly or indirectly I had had no communication with him, or any of his family, since his uncle's death. I heard from him for the first time that the prisoner, Arthur, was one of his eight children, and the nearest direct descendant of my old patient. Mr. O'Connor told me that his son had always been delicate; that he was a great favourite with everyone, and remarkable for his gentle and inoffensive disposition. But latterly this had changed; he had become irritable, and subject to gusts of passion, and had complained of pain in the head. The change was so marked that Mr. O'Connor had mentioned to friends his fear that *his son's brain was affected*. This important statement, upon subsequent inquiry, I found to be strictly true. He thought his son's attack upon the Queen entirely the result of deranged brain. It was contrary to the boy's training, to the feelings of his family, and to his own previous conduct. Mr. O'Connor was quite aware of the law bearing upon his son's case: if insane, he would be confined during Her Majesty's pleasure; if not, he was liable to any punishment not more than seven years' imprisonment with hard labour, and two floggings. He entreated me to visit his son and give my opinion as to his mental condition.

On the 12th of March I therefore, with Mr. Gibson, saw the youth in Newgate. I found him of weak and feminine appearance, his head smaller than it should be, and his palate highly arched; the pupils of his eyes were widely dilated, and the eyes themselves had the glistening appearance which is so frequent in disease. He spoke with easy and pleasing address, entering fully into his history. He corroborated his father's account of his health, and, in addition, gave long details as to dyspeptic pains after eating, especially in the jaw-bone, with dizziness and fulness in the head. He had had bone disease, and, after four operations, his great toe had been finally amputated. He had suffered from cough and expectoration of blood. He was always under care, but, he said, the misfortune was that so few medical men could understand his case. He dwelt upon this, and gave details of his symptoms that indicated, in my opinion, a fanciful and hypochondriacal state of mind.

Four years ago he had been knocked down by a Hansom cab, had received a severe scalp wound, the scar of which I examined. He was carried in a state of insensibility to the hospital. I could detect no fracture having taken place, but there had been, of course, concussion of the brain at the most dangerous time—that just before puberty, which in his case was long delayed. Latterly he had suffered much from pain in the head and sleeplessness, such sleep as he had being much disturbed. His next brother and his sister were somnambulists. His pulse was very weak; and

during the whole interview, although the incidents he narrated were most exciting, it never rose in frequency. At the close of my examination of him he was much flushed and exhausted apparently from physical prostration.

The history of his intended crime was shortly this:—One Sunday morning, while walking by the Serpentine, the idea came suddenly into his head to shoot the Queen, and thus release the Fenian prisoners. He said he did not allow the idea to remain, *because it occurred to him* that the Prince of Wales would succeed, and thus the Fenian prisoners would receive no benefit. If shooting Her Majesty would have released the prisoners, he said he should have thought it justifiable to shoot her. He thought he was quite a proper judge of such a question, and that his good motive would excuse the crime. However, his second idea was to make Her Majesty sign a paper ordering the release of the Fenians, and containing a special provision that he (O'Connor) should be "shot," not "hanged," for the "outrage." This lengthy document he proposed to read to the Queen in the aisle of St. Paul's Cathedral, while holding a pistol to her forehead. All around would have been "paralysed"; pen and ink would have been brought; he should himself have been probably "bayoneted" on the spot, but not before the paper was signed; thought his scheme sure of success if he could only have seized the Queen. On the Friday before Thanksgiving Day, he, for the first time in his life, did not pay over his wages to his mother, but retained seven shillings, refusing to tell her his reason. On Saturday he spent five shillings in buying a pistol, and made inquiries as to loading it; he afterwards told Dr. Sabben where he should have procured powder. On Sunday night he accidentally broke the lock of this pistol—it therefore became useless; he still took it with him to the Cathedral, and also a large knife, which he said he should have used to intimidate the Queen had the pistol failed to do so.

Although I quite believed that O'Connor had no design upon the Queen's life, it appeared to me certain that it was not the boy's original intention to take an unloaded weapon to the Cathedral. I believed, and believe still, that, but for an accident, the pistol that he did at last succeed in holding within six inches of the forehead of the Queen would have been charged and loaded. Armed with such a weapon, whether hysterical, or enthusiastic, or insane, he would probably have enacted a tragedy in St. Paul's Cathedral that would not soon have been forgotten in England.

What O'Connor actually did afterwards is perhaps sufficiently well known. He got into the cathedral by a stratagem on Monday night, but was fortunately discovered and turned out. He tried again the next morning to get near Her Majesty, and persistently dogged her carriage daily till the afternoon of the 29th, when he attempted to get into it at the door of Buckingham Palace. Again he told me "his scheme failed only because he had not waited till the Queen had alighted. If he could have seized her he must have succeeded." He would express no regret for the contemplation of this heinous crime. He said he had no animosity to Her Majesty; he looked upon her only as a political personage. He thought the scene in the cathedral would have caused much horror and distress to everyone throughout the country, but that was nothing if the Fenians had been released; he cared not at all for his own life.

Considering the sudden way this absurd crime had occurred to a hitherto mild and inoffensive youth, taking with his physical condition the fact that he had several relations insane, and that his father had recognised his mental state before the deed was attempted, I came to the conclusion that an occasion of great national excitement had developed in this poor boy a paroxysm of insanity, rendering him while it lasted highly dangerous. I saw him with Dr. Maudsley again on the 22nd of March; he was quieter and more subdued, but my original opinion was confirmed, and he repeated the same views and narrative.

In cases of alleged lunacy there is no evidence more important than that furnished by the writing or the correspondence of the patient. O'Connor told me that he had burnt all his papers the night before he set out to hide in the cathedral. This appeared an indication of his desperate resolution, and of the truth of his statement that he thought he might probably lose his life and never return home. One bundle of papers was, however, accidentally found and brought to me. It consists of about seventeen pages of foolscap sewn together. From internal evidence it would appear to have been principally written this year. Quotations from Byron, nursery rhymes, prayers, and law papers, are incoherently mixed together. One line of a quotation underscored in red ink, runs thus, "*Woe to the hand that shed this costly blood; and it did.*" In the same way the first lines of the Lord's Prayer are quoted correctly, and again, underscored in red ink, after the words "As it is in Heaven," comes "*and so as it was.*" I read some passages of utter incoherence to the father and mother. Mrs. O'Connor said she had heard them before, that they were nonsense, and she had expostulated with her son for thus wasting pen and ink; his answer was, "You know nothing about it, mother; it is very valuable, and some day will be printed and published." I had no reason to doubt the truth of Mrs. O'Connor's statement, and, if true, the document in question was clearly the product of a brain at all events at that moment disordered, unless explained by intoxication or childish folly.

With this apparently strong case I sought, with the father's consent, the opinion of other experts and medical men. At my request Dr. Tweedie, Dr. Maudsley, Dr. Sabben, and Mr. Henry Smith visited the prisoner in Newgate. Dr. Tweedie, with the late Sir W. Lawrence, had attended Feargus O'Connor, his great uncle, while confined in the House of Commons. These gentlemen all concurred in thinking the prisoner, Arthur O'Connor, was more or less weak-minded, and that he would probably be dangerous if at large. Dr. Maudsley and Dr. Sabben wrote for the defence their distinct opinions that the prisoner was absolutely of unsound mind.

At the last moment, when brought before the Grand Jury, Arthur O'Connor pleaded "Guilty." He did this under the idea that he was involving himself in an untruth by any other plea. This decision of his is spoken of with approbation; but it was absurd, inasmuch as since the sentence he admits in writing that he was at the time of the "outrage" out of his senses. The plea of "Not Guilty," on the ground of insanity, was therefore the proper one, being merely technical, and not implying any contradiction of fact. With a case of insanity apparently so strong, and without information as to the case for the prosecution, I think the defence were justified in attempting to question O'Connor's capacity to understand the nature and result of his pleading. At all events, I had no share in the decision as to the course to be adopted. My written evidence was in the counsel-brief, and that I gave at the request of the parents of the prisoner, who hoped at least to procure some mitigation of punishment. To the question whether the boy I saw in the dock was then "mad," I could give no other answer than that I did not know, not having seen him for three weeks. The Judge ruled, I have no doubt most legally, that no evidence as to a previous insanity was material. I must say, during a long and "caustic" cross-examination by the Attorney-General, the Judge (Baron Cleasby) was most considerate to me; and the sentence he pronounced showed that my testimony as to the boy's physical and mental condition was not altogether useless. My present opinion is that Arthur O'Connor is now in his normal state—a lad of weak brain-power, who, from disease, injury, and hereditary predisposition, is liable at times to paroxysms of dangerous lunacy.

I doubt if my evidence has widened the breach between law and medicine; if so, it was no fault of mine. I fairly stated my opinion, and the reasons upon which it was founded. I may have mistaken O'Connor's case—I may be entirely wrong; but I honestly believed that the poor boy, immediately before and for some time after his attack upon the Sovereign, was of unsound mind. I had stated so in my written opinion; I could not refuse to confirm it upon my oath. In spite of the triumph of the lawyers, the symptoms of O'Connor's case may lead some few to consider it possible that the poor boy was not a political enthusiast, or a mere imbecile lad, seeking notoriety. Carefully considered, they seem to indicate that immediately before and after his mad attack upon the Sovereign, his reason and judgment were temporarily weakened and perverted, as they may be again, by the excitement of a great national festival acting upon a brain weakened by scrofulous disease, by hereditary predisposition to insanity, and by direct injury to the head.

Albemarle-street, April 23rd, 1872.

ADDITIONAL NOTES ON THE CHOLERA EPIDEMICS ON THE EAST COAST OF AFRICA.*

BY JAMES CHRISTIE, M.A., M.D.,
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[THESE notes refer to the papers "On Cholera Epidemics in East Africa," published in THE LANCET last year (vol. i., pp. 113 and 186).]

First Epidemic.—I regret much that I have to correct an error in the date of this epidemic. I stated that it occurred in December, 1835, and January, 1836. The correct date is December, 1836, and January, 1837. The mistake occurred in consequence of the difference between the Mahommedan and Christian year. Regarding this epidemic I have nothing further to communicate.

Second Epidemic.—In the date of this epidemic there is also a mistake. Instead of 1859–60 it ought to be 1858–59. That this date is correct is made certain by the statement of Captain Burton in "Lake Regions of Central Africa," vol. ii., p. 319: "In the early part of 1859 a violent attack of cholera, which extended from Maskat along the Eastern coast of Arabia and Africa, committed terrible ravages in the island of Zanzibar and throughout the maritime regions." At the time of writing I was not aware of the origin of the epidemic, and I was led this year to doubt the correctness of the date from having been informed that cholera was prevalent in Arabia in 1858. Arabs from Makulla informed me that it was prevalent there, and that it reached their district from Jiddah. The American barque *Maryland* left Muscat on the 22nd of October, 1858, and arrived at Zanzibar on the 15th of November of the same year, and brought the news that cholera was prevalent in Muscat on the departure of the vessel. The epidemic reached Africa from the Arabian coast, and the first case on the island of Zanzibar occurred at the end of November, 1858, a negro in the service of Ludda Damji, manager of the Customs, having been attacked. The epidemic ceased at the beginning of March. It is somewhat remarkable that during this epidemic, as in the last, the fatal cases amongst the Europeans were confined to the shipping, two deaths having occurred in February on board the American whaler *Xantho*, then in the harbour.

Third Epidemic.—The date of this epidemic is correct.

In the course of investigating the origin of the second epidemic, I ascertained that in 1865 there was cholera at Mecca and in Zemen, but that it did not reach the district of Makallah. My informant, an Arab of remarkable intelligence and of high standing, was in the infected region at the time, and he stated that it originated, or rather proceeded from, the Red Sea ports, and that it was conveyed along the coast in dhows. I thought that this was sufficient to connect the epidemic in Africa with that in Arabia by means of dhow communication, but, on interrogating the people from Mukdesha, I was surprised to hear that, instead of reaching that place direct from Arabia or the Red Sea, it came from Brava and Merka to the south. The evidence of these people could not be doubted as they were positive on the subject. At this time I had the good fortune to meet Mr. Brenner, presently resident in Zanzibar, but who was in 1865 in connexion with the exploring expedition of the late Baron Von der Decken, which left Zanzibar in May 1865. The party, after visiting several places on the coast, and making short excursions towards the interior, entered the River Jub in June. During the interval they encountered the epidemic, which was raging with great violence on the coast towns. Several of the natives in connexion with the expedition died, and the baron himself had a severe attack but recovered. When the party reached the town of Barderah on the Jub, soon afterwards the scene of the brutal murder of the baron and the medical officer of the expedition, they ascertained that the country in that neighbourhood was at the time free of cholera, but that the district had been affected. On inquiring concerning its line of progress, Mr. Brenner was informed that it came to Barderah from Gananah, along the trade route, and to Gananah from Berbera, on the Gulf of Aden, along the great caravan route. From Barderah, on the Jub, it passed towards the coast to Brava, and from thence northward to Merka and Mukdesha, and to the south, as stated in my former paper. The epidemic reached the coast in May and continued till August, and spread from the coast towns toward the interior, but not any great distance. I had previously looked upon Berbera as a locality where a cholera epidemic was very likely to originate, or from which it would spread over Africa. At Berbera there is a great annual fair held, which lasts from October till April, the place being entirely deserted during the interval. It may be described as the meeting place for the various inland tribes and the traders from the Red Sea, the Persian Gulf, the Gulf of Oman, Aden, and various parts of India. Formerly, as many as 20,000 strangers were usually collected there at one time, and although the fair has decreased much of late years, still there is annually a very large gathering. The inland tribes from the neighbourhood of Gananah would probably leave Berbera in the month of March on their return journey.

I am not certain that cholera actually prevailed as an epidemic during the time of the fair, but there can be no doubt regarding its line of progress, nor regarding its being at about that time in the Red Sea ports.

Fourth, or present Epidemic.—I had an opportunity of examining lately two men who were leaders of the caravan which penetrated the Masai country, and brought to the coast the first intelligence of the existence of the epidemic in the interior. Their narrative was one of great interest in many respects, and they seemed to be thoroughly acquainted with the territories described. One had made fifteen caravan journeys amongst the Masai, and the other nine.

The caravan left the Pangani in November, 1868, with over 1000 men, and proceeded towards the interior, keeping the river Pangani, or Rupee as it is called higher up, on the left. On the fourteenth day of marching they reached the Lake Jipe, and on the sixteenth day the town of Urombo, near Mount Kilimanjaro, and on the twentieth day Marago ya Kanga, the first Masai town. On the forty-ninth day they reached the Masai encampment at Kisima in the district of Laikepya, on the fifth month after their departure from the coast. There are many delays in travelling, and sometimes they remain for more than a week in one place without moving. When at Kisima they were told that the Masai had made a raid on the Somali to the north, and that while in their country they were attacked with some deadly disease which they brought with them to their own country, but they had no name for it, and had never known it before. At Kisima the party which had reached the district separated in all directions to trade with the Masai, and after being absent for about a month they reunited and started on their return journey. One of their party died at Kisima, but they did not suspect that it was cholera as it did not spread. On their return they made a detour, and kept the Kilimanjaro to their left. On the seventh month they reached the town of Lytoketoke, not far from Kilimanjaro, and there they saw for the first time people dying of the plague or cholera. Formerly it was merely a matter of report, but when they saw those affected they knew at once the nature of the disease, and hastened towards the coast. Lytoketoke is six days from Harush, and when they reached that place they met a large caravan from the Pangani, going to the Masai country. They told them that the whole district was affected with cholera, and advised them to return, but, not attending to their advice, they pushed on, but altered their line, not passing in that of the returning caravan, which reached the coast in safety, only one of their number having died. I have every reason to believe that the statement of these men is correct, as I had several opportunities of checking their distances. The town of Kisima must be considerably to the north of the equator. They said that they never went into the country of the Somali or Galias, but that they had met traders from Brava who regularly trade in these districts. Their description of the countries through which they passed and the rivers crossed was of great interest, but foreign to the present inquiry.

Another man who was with the caravan met on its inward journey was examined previously, but not by myself

* Read before the Epidemiological Society, February 14th, 1872.

personally. I regret this as he was one of the few survivors who reached the coast; but I hope to be able hereafter to get hold of him. He stated that on the fifteenth day from the Pangani they arrived at Harush, where a portion remained to trade in the district; that the remainder passed on to Dasikera, where another portion remained, and that, as ivory was very dear and scarce, the remainder pushed on to the district of Laikepya, where the great body of the Masai were. When there, they knew that the Masai were dying in great numbers, and as those of the expedition were also attacked, they collected their ivory and goods, and, having concealed the greater part in a hole which they dug, fled to the coast. On their return they passed through the districts of Dasikera and Harush, but the whole of the trading party in these two places died. After their arrival at the coast, cholera appeared, and it appeared in all the districts through which they passed. Out of about one hundred and fifty of the party that started from the frontier Masai district, only seven reached the coast alive. This man stated that when in Laikepya he heard that the Masai had made an attack on the Somal Gurra tribe, who possess camels, horses, and cattle, and that they had brought the disease to their own country. He also said that the next tribe to the Somal Gurra was the Galla Borani, whose territory was on the south of the Jub river. This brings us very near to the line of the cholera epidemic of 1865, stretching from Berberah to Gananah and Barderah, but beyond the district of the Somal Gurra I have not been able to trace it. Investigations, however, from the direction of Brava have been set on foot, as trading parties from that place visit the Somal Gurra, the distance being under a month. If it did not start from Berbera, it probably proceeded from Abyssinia, which is very likely, or from some place on the west coast, crossing at about Gondokow. But conjecture is useless. I have requested several people about to start shortly for the Masai country to collect further information both as to its origin and regarding its devastations among the people.

On the arrival of the natives from the northern ports I had an opportunity of collecting information regarding the spread of the epidemic. It passed along the coast generally, attacking the inhabitants of all the towns in communication with Zanzibar. When direct communication with Lamoo was open on the change of the monsoon, the epidemic reappeared with greater violence than formerly when it first reached that place from Melinda. It lasted four months, and the only section of the population not attacked were the natives of India. It also appeared at Mukdesha and Worsheikh, and affected the population of the maritime districts to a distance of from two to three or four days from the coast. It appears reasonable to suppose that it did not pass further inland in the districts to the north simply because at that season the trade routes were closed, and the people residing in one district belonging to distinct tribes have no intercourse with their neighbours. The people from the inland tribes generally bring their produce to Brava, Merka, Mukdesha, and other places, before the dhows leave for Zanzibar, and they return with their purchases at once. The produce that they bring consists of hides, ivory, and gums (such as myrrh of Arabia), but principally the two former, orchilla weed and gum copal being a coast produce. The ivory and slaves' caravans, starting from between Kiliva and the Pangani, do so at all seasons, and, consequently, those starting from infected districts carried the disease with them along their line of march. This epidemic reached to the north as far as the island of Socotra. The Socotra dhows leave Zanzibar very early at the first break of the monsoon, and generally call at Mombassa, the whole passage being about fifteen days. My Socotra friends state that in one of their dhows one man died on the passage, and that on arrival at its destination the disease broke out at Bunder Kadu, near to the principal town Bunder Kalassia. It did not spread generally throughout the island, and there were only about twenty deaths at Bunder Kadu. They spoke of a former epidemic which was very fatal at Bunder Kalassia, and which I supposed to be that of 1858–59.

The time has not yet arrived for the collection of full particulars regarding the spread of the epidemic to the south of Zanzibar, so that the remarks to be made are incomplete, and some may require correction. The disease lingered in Mozambique and the neighbourhood for about eight months. On January 11th, 1871, it appeared at Ibo, to the north of Mozambique, and about the same time at Quilimane, to the south, it being conveyed in both cases in dhows from the infected Mozambique district. My informant, the principal banyan merchant at Ibo, states positively that it did not reach that place by the coast traffic, but by dhows. It lasted for a month and a half, and there were about thirteen hundred deaths, but no natives of India were attacked. Five of the higher class of Portuguese died, and twelve Portuguese soldiers. At the time of his departure from Ibo, about the beginning of May, no cases had occurred for about a month, the last case that he heard of being on the 11th of March; and he had heard that the epidemic had passed towards the interior to about five days' journey from the coast. The last case of cholera at Mozambique was in March last.

Native merchants from Nossi-bé inform me that cholera appeared at Majunga, on the north-west coast of Madagascar, in August, 1870; that it was conveyed in native craft from Mozambique; and that it was communicated from Majunga to the French island, Nossi-bé, in September. It was then confined to the native town Ambanourou, around which a *cordon militaire* was placed. The epidemic did not spread at the time. During this epidemic there were about 160 deaths. In March, 1871, cholera again appeared at Nossi-bé, at the time of the arrival of the Seychelles mail, and three men on board the mail steamer died. I have heard nothing regarding its mode of communication. It was confined entirely to the French town, Helleville. Not many deaths had occurred, and a cordon was placed round the town.

In December, 1870, a quarantine of fourteen days, afterwards of twenty-one days, was established at Mauritius, as the north coast of Madagascar was infected, and as cases supposed to be sporadic had occurred in Mauritius. In January, 1871, it is reported from the same island that several cases had occurred, usually fatal; and, fearing that it had been conveyed from Madagascar, a petition had been presented to Government praying that communication between Madagascar and Mauritius might be "entirely prohibited" until the latter island became free of cholera.

In my former paper a mistake occurs at the middle of the second column of p. 187 in THE LANCET. Instead of H.M.S. *Cossack* it should be H.M.S. *Dryad*.

ON

TWO CASES OF RECOVERY FROM CHLOROFORM ASPHYXIA.

BY JAMES HARDIE, M.D.,

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IT cannot be disguised that both the professional and public mind have been much disturbed of late by numerous lamentable deaths from the administration of chloroform, and that a certain timidity, which did not formerly exist, has crept into the minds of many men in the use of this agent. The accident is so sudden and appalling, and so quickly carries the subject of it beyond all means of recovery, that it is of the utmost importance that everyone should possess as clear an understanding as possible of its nature and of the means he should have recourse to under the circumstances.

It appears to me but right, therefore, that I should publish the particulars of two cases which I have myself met with of recovery from what those who witnessed them will agree with me may with propriety be described as apparently perfect death. I am the more desirous of doing so seeing that the means employed in these cases do not appear to be generally known in this country, and were not tried, so far at least as I have been able to judge from the accounts of the cases, in any which have proved fatal since my attention was directed to the subject in 1868.

Both patients were under my care at the Clinical Hospital in this city, and the entire credit of their recovery is due to my colleague, Dr. Gumpert. Dr. Gumpert usually undertook the care of the chloroform at operations in the hospital, and took the precaution of always having a galvanic

battery in the room. This, he has since told me, was with the intention of using it in the particular manner to be described, should the occasion for it arise. The notes of the cases are transcribed from those of the house-surgeons in the case-book, written within a few hours after their occurrence. They differ slightly from my own impressions of what took place, particularly in the first case, but are more likely to be correct.

CASE 1.—(Dr. Finlayson's notes.)—Harry L——, aged ten years and nine months, was put under chloroform (Dr. Gumpert officiating) for the removal of a cyst in the right scapular region. When the cyst was cut down upon an escape of fluid with curdy contents took place. (The tumour had previously been considered fatty.) This momentarily distracted Dr. Gumpert's attention from the patient, whose pulse was good a minute before, and whose respiratory movements were observed by the ribs. The patient was lying on his left side in a semi-prone position. Dr. Gumpert now noticed that he had ceased to breathe, and the pulse could not be felt. Cold affusion failed to induce respiration, and the patient had a very slightly livid appearance which soon passed off into pallor. The window was opened, and one or two artificial elevations of the ribs produced without any improvement. The larynx was felt to be open both by Dr. Gumpert and Dr. Hardie. The aspect of the patient now seemed very hopeless. The poles of an electro-magnetic battery (standing in readiness) were now applied to the sides of the neck, with the immediate effect of producing a spasmodic movement of the muscles of the neck and of the upper part of the chest to a slight extent; this was repeated again and again, the walls of the chest being depressed in the intervals. Slight and very superficial respiration now occurred spontaneously, and the heart's movements became visible. Occasional use was made of the battery as a stimulant to respiration and also as a general irritant. Warm fomentations were applied to the chest, and the pulse became better, though sometimes intermittent. The respiration became deeper, and the child began to cry when hurt in about three-quarters of an hour. Coffee was administered, and the operation concluded without chloroform.

CASE 2.—(Dr. Maccall's notes.)—Elizabeth G——, aged forty-two, had right mamma (scirrhous) removed in March, 1870; the disease recurred in cicatrix, accompanied with affection of the axillary glands. On Aug. 11th, 1870, under chloroform, administered by Dr. Armistead, Dr. Hardie proceeded first to remove the axillary glands, the patient lying on her back with a very slight inclination to the left side. While he was engaged in dissecting out the glands the respiratory movements ceased without previous stertor or other warning; the patient's face assumed a death-like pallor with slight lividity; the eyes were staring and the pupils widely dilated; the pulse immediately afterwards became imperceptible.* The tongue was at once drawn out, but without response on the side of the respiration. The poles of an electro-magnetic battery were applied to the root of the neck over the phrenic nerves (cold affusion and a few acts of compression of the chest having in the meantime failed to induce respiration.) For a time there was no response, and the patient's condition seemed hopeless. At length, however, a short gasp came, then others, which soon became deeper and regular; the pulse became perceptible, the colour returned to the face, and the pupils contracted.

To this account I would only add that, though in such circumstances it is of course very difficult to estimate time correctly, after the operations we compared our several impressions on this point, and I believe that I am within the mark when I put down three minutes for the first case, and fully one minute for the second, as the length of time they respectively appeared to be dead. Certainly it seemed to be much longer, particularly as regards the boy. In that case I had altogether lost hope.

Faradisation of the phrenic nerves in chloroform poisoning is based on the supposition that it is the respiratory process which is at fault. Since Snow wrote his book with his elaborate collection of cases, the opinion has been almost universal that, whatever may have been the exact pathological process, death nearly always originated at the heart. It must be confessed, however, that, as regards such cases, the vast majority of medical men have exceedingly obscure ideas, which may amount to this: that they are in some way attributable to an ill-defined diseased condition of the heart (oftener supposed than discovered at the subsequent post-mortem examination); and in the case of others, again, who have formed more elaborate theories, that these for the most part rest on the flimsiest possible evidence. For the other side of the question I would refer to papers by Dr. B. W. Richardson in the *Med. Times and Gaz.*, vol. i. 1870. It is not for me, in the present state of our knowledge of the subject, to attempt to judge between these opinions. I may, however, be permitted to point out that the evidence deducible from these two cases, as well as others of the same kind, is strongly corroborative of the view that it is the respiratory process which fails first. The direct employment of means to an end, and the satisfactory accomplishment of this end, so strikingly shown in both these cases, seem very convincing. In addition to this, in the case of the woman the continuance of pulsation in the radial was distinctly observed for an appreciable time after the cessation of respiration.

If it be granted that this may be the mode of death in any case of chloroform poisoning, it will readily be understood, from what we know of the effect of the interrupted galvanic current in stimulating muscular contraction, whether applied to the muscular fibre or to the motor nerves, that this agent is likely to be of the utmost service in exciting the paralysed muscles of respiration, and one would be prepared to expect a satisfactory response to its proper application in such cases. In 1842 Marshall Hall proposed sending a current through the respiratory muscles in still-born children by applying one pole to the neck, either at the back or at the side, and the other over the diaphragm. But this could only act as a superficial irritant, and will not affect the muscles in the manner referred to. Duchenne,* in 1855, first proposed the methodical faradisation of the phrenic nerve in asphyxia, and experimented on animals successfully. Ziemssen,† however, was the first who used the method in the human subject. This was a case of suffocation by charcoal fumes, and life was not quite extinct. In 1858 Friedberg first used it in chloroform asphyxia in the human subject.‡ In this case (the case of Otto Krause) respiration and pulsation were unsatisfactory for some two or three minutes, during which cold water, liquor ammoniæ, and other irritants were used. Respiration and pulsation then completely stopped, and for three minutes artificial respiration was tried without avail. Then galvanism was applied to the phrenic nerves, and after the application the diaphragm responded and the patient gradually recovered. Ziemssen records several cases, in which he himself also used it, of suffocation from poisonous gases; and since then I believe that several cases of its successful employment in chloroform accidents have from time to time occurred in Germany.

The poles should be large enough to cover a considerable surface, and should be placed behind the posterior border of the sterno-mastoid, one on each side, a little below the middle of the neck, and be pressed deeply inwards and forwards, as if to get under the edge of the muscle. In this way the phrenic nerves, as they pass downwards in front of the scalenus anticus muscles, cannot fail to be brought under the influence of the current, and these muscles themselves will also be stimulated to contraction. As soon as an inspiration has taken place the poles should be raised, while an assistant compresses the chest walls to imitate the expiratory movement. When this has been done and the pressure has been removed, the poles are again applied, and so the process should be rhythmically continued until the danger has passed or the efforts are clearly unavailing.

It is not my wish to decry other means which have their advocates for averting a fatal issue in these accidents. I am only desirous that this method should be brought prominently under the notice of the profession, and that, whatever theory anyone may hold as to the mode of death, due weight may be given to the fact that this plan of faradising the phrenic nerves has in these two cases and certain others been the means of rescuing patients from death. Nor am I sure that it is asserting too much regarding it to say, that of all means which have been tried it has been proved to be the most successful, taking into consideration the condition of

* Dr. Armistead had observed that it could be felt after the respiratory movement had ceased.—J. H.

* De l'Electrisation localisée.
† Die Electricität in der Medicin. Second Edit.
‡ Virchow's Archiv, 1859, Bd. xvi.

the patients. I think, therefore, seeing that one can never be sure that on any occasion an accident may not occur, it would not be giving too much weight to these cases if the knowledge of them induced every medical man to make one of the many convenient portable batteries the invariable companion of his chloroform bottle.

Manchester, March, 1872.

IMPACTION OF A LARGE GALL-STONE IN THE ILEUM.

By HENRY MEYMOTT, M.R.C.S.

H. E——, aged forty-seven, a short, robust woman, the mother of one child, and the subject of several miscarriages, came to me on February 21st, 1872, complaining of considerable pain in the epigastrium, with constipated bowels. I supplied her with a warm aperient, and on visiting her the next day found her much worse. The medicine failed to act, and the only result of some subsequent stimulating injections was the expulsion of a few scybala. In a day or two stercoraceous vomiting set in, and for several days immense quantities of feculent matter were vomited. No symptoms of strangulated hernia beyond the vomitings could be detected, nor did it altogether seem to be a case of intussusception. There was much tenderness on pressure in the left hypochondriac region. This state of things continued with more or less intensity till her death, which took place on March 17th, being twenty-six days after her application for medical relief, and twenty-eight days since the last natural action of the bowels, which was compared to the motion of an infant. The treatment was simply palliative, and the case was watched with much interest. It was very difficult to obtain any reliable history of the case previous to her application for medical assistance, but it would seem that some weeks before, she felt severe pain, which, to use her own expression, "Brought her to her two doubles."

A post-mortem examination revealed a hard substance impacted in the ileum, about four inches distant from the ileo-cæcal valve. It completely distended the gut, which was sphacelated to the extent of several inches, and had one perforation about the centre of the concretion on the upper portion. The body altogether was remarkably well nourished considering the very small amount of nutriment that had been taken for four weeks. The mesenteric glands were of good size. A large quantity of fetid gas escaped on separating the portion of intestine containing the obstructing mass. As there was amply sufficient cause of death brought to view, and as the examination was conducted under several disadvantages, no other portions of the body were dissected. On detaching its intestinal covering, the tumour was found to be of a dark-brown colour externally, of a pear shape, and as hard as a cricket-ball. It weighed 400 grains. A longitudinal incision was made through it, and the central portion was of a dirty-white colour, hard, but yet readily yielding to the knife. Dr. Moxon, of Guy's Hospital, to whom it was sent, pronounced it to be cholesterine. It was surrounded by concentric layers of hardened bile, of a yellow hue, deepening towards the surface. I may remark that no suspicion of finding a gall-stone was entertained; for no symptoms indicative of any derangement of the liver or gall-ducts had ever presented themselves. In all probability the pain before alluded to was caused by the passing of a small, or perhaps moderate-sized stone through the ductus communis choledochus into the alimentary canal. In that case I would venture to infer that the stone gradually increased in size, in its passage from the mouth of the duct to the place where it was found, from continuous deposits.

The case shows a remarkable tenacity of life, and the great length of time the alimentary organs will bear a suspension, as well as a perverted action, of their natural functions.

Ludlow, March, 1872.

OPIUM is now cultivated with considerable success in some parts of the colony of Victoria.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

EXCISION OF THE HIP-JOINT; RECOVERY WITH GOOD LIMB.

(Under the care of Mr. THOMAS BRYANT.)

J. J——, aged six years, admitted into hospital May 9th, 1870. In June, 1869, patient fell from a wall two and a half feet high, on his right hip; in consequence of this he was kept in bed for three weeks, the hip was frequently bathed with warm water, and marsh-mallow poultices were applied. Soon after the accident, a lump, about the size of a duck's egg, appeared just below Poupart's ligament; this was poulticed, and after a time disappeared. At the end of three weeks he was able to walk about, but was lame, and complained of pain and aching when he took exercise. A doctor saw him, who said it was only a bruise, and ordered hot fomentations. He was put to bed again subsequently, and attended by a doctor, who ordered a liniment to be used. Two weeks before admission the doctor exercised the limb by forcibly flexing the thigh upon the pelvis so as to touch the child's abdomen. Thinking that the child's hip was out of joint, he advised the parents to send him to the hospital.

On admission, the right leg was considerably shorter than the left; it was everted, so that the patella pointed directly outwards. The head of the femur was dislocated upon the dorsum ilii. When the hip was touched he had very great pain. There was no fluctuation. The skin over it was normal. There were no sinuses.

On May 25th, the child being under chloroform, the limb was extended, the extension being kept up by weights. Sand-bags were placed on both sides of the limb, so as to prevent any movement laterally. A leather strap was fastened to the head of the crib, and was passed round the left thigh. He was ordered a teaspoonful of cod-liver oil and steel wine three times a day.

June 11th.—Has been very restless; talks a great deal in his sleep. Hot fomentations were applied to the hip, and one of the weights removed.

15th.—Glands on both sides of the limb swollen, tender, and hot. Fomentations were continued, and the pain and tenderness gradually subsided. The weights attached to the leg now weigh 2 lb. 14 oz.

30th.—An abscess is forming, and there is some displacement of the limb upwards.

July 2nd.—Mr. Bryant made an incision, and about eight ounces of pus mixed with blood were evacuated. The parts to be poulticed.

7th.—The discharge continued till to-day; no redness of skin about the wound. The poultices to be discontinued, and wound dressed with wet lint.

13th.—There is tilting of the right side of the pelvis, and apparent shortening of the limb; also some swelling on the outer side of the right hip. The extension by weights still continued.

21st.—There is a good deal of discharge, which is very offensive. The wound to be syringed with carbolic-acid lotion. The pelvis now moves with the limb; dead bone is detected. The discharge continues as before, and it was decided to excise.

Aug. 24th.—The patient was put under chloroform, and Mr. Bryant excised the head of the femur, using the chain saw, and then separating it with his fingers. The portion removed included the trochanter major, the epiphysis separating in the removal; hæmorrhage was arrested by torsion, the edges of the wound brought together by sutures, and a splint was applied to the limb.

27th.—Sutures removed to-day; wound dressed with car-

bolic oil, having been previously syringed with solution of permanganate of potash.

Sept. 6th. — Patient doing well; appetite rapidly increasing; he sleeps well; the discharge is decreasing.

20th.—Wound filling up rapidly. The weights were discontinued to-day, and the patient was told he might move his leg.

30th.—Patient is very cheerful, has no pain, and eats and sleeps well. Wound almost healed.

Oct. 18th.—Has been up for three days. He can walk with assistance, but is unable to bear the whole weight on the right leg.

24th.—Discharged to-day. He was seen two weeks after this, and was doing well, and able to bear considerable weight on the right leg.

MIDDLESEX HOSPITAL.

COMPOUND COMMINUTED FRACTURE OF THE LEG; FOUR ATTACKS OF ERYSIPELAS; PLEURISY; TREATMENT BY ANTISEPTICS; GOOD RESULT.

(Under the care of Mr. HULKE.)

T. D——, aged thirty-six, a stout, heavy baker, admitted July 11th, 1871, with a compound fracture of the left leg, caused by slipping off the step of an omnibus. An oblique wound of the soft parts, at the inner side of the leg, about two inches long, communicated with the fracture, which was a hand's-breadth above the ankle. The wound was washed with a watery solution of carbolic acid (1 to 40), and closed with a pledget of lint soaked in carbolised oil, and covered with a layer of gutta-percha and plaster. The limb was placed on a Bell's back splint, with side splints, and ice continually applied. On admission the pulse was 72, temperature 97·6° F. On Feb. 13th the temperature was 102·6°. In consequence of hæmorrhage the dressings had to be changed. On the 14th the pulse was 132, temperature 103·4°; leg slightly swollen. On the 15th the temperature was 105°, the pulse 124, full and hard. Some cough and oozing of blood from the wound still continued. Some ecchymosis observable, extending up the leg to the upper third. On the 18th the leg was considerably swollen and red, with a bulla on the external malleolus. His urine was high-coloured, and contained some bile, and yellowness of conjunctiva was observable. Pulse 104, temperature 103°. On the 19th the erysipelas had increased. A lotion of sulphate of iron (ten grains to an ounce) was ordered to be applied to the limb. The next day the erysipelas had increased, and there was much bronchitis. Incisions were made in the limb, and a lotion of chloralum was applied. On the 21st a mercurial purgative was given, and the incisions were washed out with a solution of sulphurous acid (1 to 8). From this date he steadily improved till July 31st, when the pulse was 100, and the temperature 98·5°. A splinter of bone had been removed from the leg on the 28th, and the erysipelas had quite subsided.

On August 5th he had some return of his troubles, and two days later his temperature rose to 102°. He had sore-throat, some cellulitis on the inside of the thigh, and a slough formed on his heel. On the 23rd this condition of things had subsided. The splint was readjusted, the leg looked quiet, the incisions still discharged, no union had taken place. The wound was still syringed with the sulphurous acid lotion, and dressed with unguentum cretæ.

On Sept. 7th the erysipelas returned for the third time; the leg was very red and swollen, the redness extending along the course of the lymphatics about the knee to the upper part of the thigh. He was ordered a dose of calomel and a mixture containing perchloride of iron, and the leg was dressed with sulphate-of-zinc lotion. This continued till the 13th, when his temperature rose to 104°; and on the following day he was seized with pleurisy of the left side. The zinc lotion was continued till the 25th, when all redness had disappeared, but there still remained much brawny hardness and swelling of the leg and thigh.

He continued to improve till Oct. 23rd, at which date the sinuses and incisions had healed except opposite the fracture, where there was a sequestrum. A starch bandage was applied, the pressure of which caused rapid diminution in the size of the limb, so that on the 27th it had to be "taken in."

He went on well till November 25th, when, the wound opposite the fracture not having healed, it was dilated with a laminaria tent, and a sequestrum was removed. He now went on well with the exception of a fourth slighter attack of erysipelas, which was treated in the same manner as the former one, and with like results.

On December 21st he was discharged convalescent, with a useful limb.

We are much indebted to Mr. Barber for the great assistance afforded us in obtaining the notes of the above case.

SEAMEN'S HOSPITAL, GREENWICH.

LEUKÆMIA LYMPHATICA.

(Under the care of Dr. STEPHEN H. WARD.)

For the notes of the following case we are indebted to Mr. Adam Young, house-physician.

L. L——, aged twenty-four, was admitted into hospital March 21st. He gave the following history:—Four months ago he noticed some enlarged glands in the left axilla; about a week afterwards those of the right became enlarged; then in about a week or a fortnight the glands in the neck and about the jaw increased in size. There was no pain in them at first; when he raised his arms at work the glands in the axilla were painful. He attributed the enlargement of these glands to his being overworked when at Callao; at this time he was badly and scantily fed. Five weeks ago he went into the Cork Hospital; at this time his breathing was oppressed and hurried, and he was also troubled with a frequent tickling cough. He had some difficulty in swallowing his food, and complained of a tightness in his throat, "as if the pipes were constricted," he said. Till this present illness he has always had good health.

State on admission.—The patient is generally emaciated, extremely weak, and anæmic. The muscles of the legs are much wasted. The glands in the neck and about the jaw are immensely enlarged, as also those in the axillæ. His head has the *appearance* of being unusually small, and looks as if it were resting upon an immense base of enlarged glands. There is no enlargement of the inguinal glands. The left eyelid is œdematous, and the whole face pale and puffy. When the patient lies on his back or on the left side, the face becomes quite livid and the breathing greatly oppressed and quickened. Respiration 48 in a minute. He has a frequent harsh cough. There is a fair resonance over all the chest; respiration blowing; some crepitation at the base of both lungs. No night-sweats. Pulse 86, small and weak. Heart's action somewhat increased; no murmur. The abdomen is swollen and pendulous; the prepuce œdematous. The chest walls are œdematous; the superficial veins slightly enlarged and tortuous. The spleen is very little if at all increased in size; rather tender on pressure. Liver slightly enlarged.

On microscopical examination of the blood the white cells are seen to be greatly increased in number, as many as 200 being counted in one field. Urine: sp. gr. 1034, acid; urates and chlorides abundant; no sugar; no albumen.

From the 23rd to the 29th of March the condition of the patient was very little changed. Pulse 120; temperature 104°; breathing less embarrassed.

29th.—Breathing less embarrassed; has had a good night; swallows food with greater ease; pulse 113; temperature 103·4°. Measurement round the head in a line with the chin, 1 ft. 11 in.; measurement with tape passed under the chin and over the vertex, 2 ft. 3½ in. There is not so much œdema about the face.

April 6th.—Patient died this morning apparently from exhaustion; no special change had occurred in his condition since admission.

The treatment consisted of a drachm of the syrup of the iodide of iron three times a day; and good diet with wine.

Autopsy, forty-eight hours after death.—Body much emaciated. The right pleural cavity contained five pints of clear straw-coloured fluid; the intercostal and mammary glands enlarged; there were deposits under the pleura, on the under surface of the ribs, and on the lung. The left pleural cavity contained four pints of straw-coloured fluid; and there were numerous growths of the same character as those on the right side. Several large glands were seen

upon the diaphragm, in front of the pericardium, and others around the great vessels at the base of the heart. The posterior mediastinal and bronchial glands were greatly enlarged. The right lung was compressed against the spinal column; the left lung was healthy. The pericardium contained a considerable quantity of fluid; the heart was small, weighing 9½ oz.; cavities contracted, containing no clot. Mesenteric glands greatly enlarged; stomach healthy; both kidneys congested; liver congested; spleen not increased in size and apparently healthy, weight 6½ oz. The axillary and external mammary glands greatly enlarged; the superficial and deep cervical, and the submaxillary glands were immensely increased in size.

The microscopic examination of a section taken from one of the cervical glands showed numbers of small round cells thickly packed together, and embedded in a fibrous network, the bands of which were in some places broad and very clearly defined.

NORTHERN HOSPITAL, LIVERPOOL.

CASES OF COMPOUND FRACTURE.

(*Communicated by* W. MACKIE CAMPBELL, M.B., Senior House-Surgeon.)

INTO this hospital, which is chiefly for accidents, a large number of compound fractures are admitted, and under the carbolic acid treatment very good results are obtained. During the last nine months no case has required secondary amputation. The treatment is as follows:—Immediately on admission the wound is thoroughly syringed out with carbolic lotion (1 to 20), or, as Mr. Manifold prefers, with the pure acid; it is then dressed with several layers of lint soaked in carbolic oil (1 to 10), with gutta-percha tissue over all. The limb is then put in splints, and the dressing is left unchanged until the second or third day. The dressing is then renewed, and kept as long as possible unchanged. Should any inflammation appear, poultices are applied, over the oiled lint if possible, and the following mixture is prescribed:—Tincture of perchloride of iron, two drachms; solution of acetate of ammonia, one ounce; water to six ounces: one ounce to be taken three times daily, or oftener. Or irrigation with carbolic lotion (1 to 40) is employed, and persisted in till all signs of inflammation disappear, when the oil is resumed.

The following cases treated in this way during the last three months are worthy of study. Two of them (Cases 1 and 2), compound fractures into joints, are chiefly noticeable for the rapidity of cure; cases which but for carbolic acid would be looked upon with great anxiety. Another (Case 3), a double compound fracture of the left leg, was up in forty-two days, and was discharged cured seven days later.

CASE 1.—W. T——, aged twenty-nine, a carter, was admitted February 14th, 1872, with a compound fracture into the wrist-joint, with considerable laceration of the soft parts. The wound was syringed with the lotion and dressed with the oil, and the limb placed on a straight splint. Two days after the arm was dressed there was some redness and swelling; the oil was continued, and he was ordered the iron and ammonia mixture. He had no constitutional disturbance, and was up in the second week. He was allowed out on pass on March 16th (thirty days), but is still a patient, as, from loss of covering, there is yet a small superficial wound.

CASE 2.—R. H——, aged twenty-six, was admitted Feb. 21st, 1872, with compound fracture into the elbow-joint, and fractured humerus in the upper third. The wound was treated in the same way as the last, and the limb put upon an angular splint. He had no bad symptoms, and was made an out-patient on March 2nd (nine days). He has been under my notice up till to-day (March 25th) and is now quite well.

CASE 3.—R. A——, aged thirty-two, a porter, was admitted January 5th, 1872, with a double compound fracture of both bones of the left leg. In this case irrigation with carbolic lotion (1 to 40) was started on the third day, and the iron and ammonia given. One or two counter openings had to be made, but, notwithstanding, he was able to have his leg starched on February 17th, was out of bed next day, and was discharged cured on the 24th of the same month.

CASE 4.—C. D——, a girl aged ten, was admitted on January 10th, 1872, with a compound fractured leg. The same treatment was employed; she was up on March 1st, and was discharged cured on the 23rd.

CASE 5.—M. McC——, aged twenty-seven, a labourer, was admitted January 26th, 1872, with compound comminuted fracture of the left leg. The same treatment was employed as in the last two cases. His leg was starched on March 16th, and he was up the next day.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

CASE OF PUERPERAL ECLAMPSIA AT THE FIFTH MONTH OF PREGNANCY.

(Under the care of Mr. LAWSON TAIT.)

C. J——, aged twenty-seven, the mother of two children, and to whom two miscarriages had occurred, applied at the hospital on February 12th. She complained of pain in the back occasioned by a fall. The cause of the fall she asserted to be a sudden loss of consciousness, which lasted for some time. She stated that she was within a month of her full time—a circumstance which led to the examination of her urine. This was found to be intensely albuminous, and there can be no doubt that the fall was occasioned really by a uræmic convulsion. She was ordered fifteen-drop doses of the tincture of the muriate of iron and half a drachm of nitric ether in an ounce of water, every four hours, and advised to call in medical assistance at the earliest indication of labour. At three o'clock on the morning of the 15th she was seen by Mr. Tait and was found to be in labour. The pregnancy had not, however, advanced to the sixth month. The urine was found to be only slightly albuminous, but, as a matter of precaution, Mr. Tait kept her under the influence of chloroform for about two hours. Throughout the 16th, 17th, and 18th, the uterine action seemed in abeyance, but on the 19th she was delivered of a putrid fœtus of about the fifth month. Her labour was superintended by Dr. Poncia, who reports that there were no indications of eclampsia, and that she has recovered well.

Remarks.—We have here a very unusual condition of puerperal uræmia occurring early in pregnancy, and in a multipara, causing as usual the death of the fœtus, and discovered by the merest accident. Had the patient gone untreated, there is every reason to believe that a most serious risk of her life would have occurred. Sir James Simpson pointed out the value of the combination of iron and nitric ether, and this case seems to have been one in which its efficacy was well marked.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 8TH, 1872.

THOMAS BRYANT, ESQ., F.R.C.S., PRESIDENT.

Mr. SPENCER WATSON showed a patient suffering from Mercurial Tremors. He was a thermometer maker, who had been in the trade for fifteen years, and had resisted the influence of the fumes of mercury for about seven years. Ever since the first attack he had been unable to sign his name from the unsteadiness of his hand. He had never been salivated, but his gums were sore and marked with a blue line, and his teeth were most of them loose, and some very much decayed. He had never had any affection of the bones. The possibility of such cases occurring seems to show that the supervision of unwholesome and deleterious trades is not so complete as it should be.

The PRESIDENT asked whether the workmen adopted any precaution to prevent the poisoning.

Dr. CRISP mentioned the case of a family of five who were all sufferers from mercurial tremors. They were water gilders. He thought ventilation was all-important. His opinion was that mercury was not so deleterious as was commonly believed, and that those who were poisoned by mercury, as in quicksilver mines, did not suffer from the same

mercurial symptoms as those that take mercury for syphilis; and he inferred that syphilis had to answer for more than the mercury.

Dr. WILTSHIRE observed that there was a well-marked blue line on the gums; and, as the man spontaneously stated the trembling was most at the wrists, he asked if iodide of potassium had been given, and if so, whether salivation had been observed.

Mr. WATSON said the man had five grains of iodide of potassium three times a day for a fortnight, and that no symptoms of salivation had arisen.

Mr. TEEVAN related three cases of Retention of Urine. The first was that of a gentleman aged forty-two, who was brought to him by Dr. Atwood. Mr. Teevan passed a small French catheter, but was struck with the fact that more urine escaped by the side of the instrument than through it. There was, therefore, no stricture. Noticing a shivering, he thought the patient had either a stone, a tumour, or an enlargement of the prostate. A stone was subsequently removed in the eye of the catheter. The diagnosis, made previously to Mr. Teevan seeing the patient, was that he had stricture. This was singular, as there was a history of stones removed previously. The next case was one of recurrence of stone in a patient who had previously been operated on for stone. Here a stone became engaged in a catheter, and necessitated lithotomy. In both of these cases Mr. Teevan removed the stones from the bladder by the finger without using either the forceps or the scoop. He wished especially to know the opinion of the Society as to the propriety of deferring interference for a few days, as he had done in the first case.

The PRESIDENT showed a Calculus removed from the Penis; the case was one of several years' duration. He removed it by operation. He thought that retention of urine in boys was always due to calculi, except in the case of external compression of the urethra from violence. He asked Mr. Teevan whether he had seen fistula follow the urethral incision.

Mr. TEEVAN replied in the negative.

Dr. SEDGWICK read a paper on the Mineral Waters of Tarasp. The author related that, having stayed a fortnight at Tarasp in the autumn of 1871, and having been favoured with a detailed account of the latest observations and opinions of Dr. Killias, the resident physician there, he proposed to recount his observations. After giving a short account of the journey, the climatic conditions of the neighbourhood were considered, especially the prevailing winds, the amount and character of the rainfall, and the average daily temperature during the summer months. The different classes of Tarasp mineral waters were then described, and it was shown that the iron waters differ in quantity of constituents rather than in quality from the alkaline waters. The action of the alkaline waters was considered and note taken of their restorative powers from their constituent iron and lime, in addition to their primary specific action as an alkaline and purgative saline. The manner and time of administration were described, and an exception was taken to the administration of an alkaline water with meals. The special uses of the St. Lucius alkaline water as described by Dr. Killias were recounted, and the forms of disease and of constitution in which it is contraindicated were detailed. The action of alkaline baths, and the possibility of absorption of substances in watery solution by means of the skin, were shortly discussed, and mention was made of the value of the alkaline warm bath in various disordered conditions. The properties of the iron waters and their various uses were then related. An abstract of Dr. Killias' practical experience of the uses of the two kinds of waters in special diseases was given, and an opinion as to the forms of disease and the classes of persons who were likely to be benefited or injured by a use of these waters was expressed. In the discussion that followed,

Dr. YEO dwelt on the mistake most continental bath-physicians made in recommending delicate people to drink a lot of cold water on an empty stomach. He related the case of a young clergyman who took a glass of water of St. Moritz (all these waters are very cold) the first thing in the morning. He immediately fell down in a swoon. He thought that the Engadine hardly benefited phthisical patients. He wished more English medical men would spend their holidays in the watering-places of Continental Europe.

Dr. SEMPLE thought that most of the benefit of watering-places arose from the change of air, scene, &c. He did not dispute that mineral waters, especially the ferruginous, were often very beneficial, but he thought, as a rule, their virtues were exaggerated.

Dr. LEARED agreed most thoroughly with Dr. Sedgwick, and dwelt upon the action of the alkaline waters on the acidity of the urine, and remarked that in some patients a dose or two of alkali would remove the acidity.

Mr. BRUDENELL CARTER said that Dr. Sedgwick and Dr. Leared's remarks reminded him of a statement made by a medical friend, that he could make his urine alkaline in twenty minutes by taking an alkaline bath.

Dr. Sansom, Dr. Wiltshire, and Mr. Royes Bell also took part in the discussion.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 3RD, 1872.

DR. BRAXTON HICKS, F.R.S., PRESIDENT, IN THE CHAIR.

THE following gentlemen were elected Fellows of the Society:—J. R. Bosworth, M.R.C.S. (Sutton), C. E. Buckingham, M.D. (Boston, U.S.), C. P. D. Chittenden, L.R.C.P. (Lee, Kent), Thomas Savage, M.D. (Birmingham), and A. W. Tomkins, M.D. (Leamington).

Dr. AVELING exhibited his apparatus for immediate Transfusion, which he has now modified by adding a tap at each end of the tube, close to the nozzles. He had performed the operation successfully a few days previously. Dr. Aveling believed that the methods of preventing coagulation, adopted when the mediate mode of transfusion was used, were the cause of needless deterioration of the blood and of unnecessary delay.

Dr. BARNES suggested that, instead of filling the syringe and tube with warm water, it would be better to use a solution of phosphate of soda. In reference to the defibrination of blood in transfusion, he would observe that, however carefully the filtration might be performed, it was still to be feared that in the filtrate some fibrine might coagulate and act as minute emboli.

Dr. PLAYFAIR had found no difficulty in defibrinating the blood, and he considered defibrination to be the best means of retaining the blood fluid. In his own case a gravitation instrument had failed to act satisfactorily, probably because there was not sufficient force to overcome the resistance of the venous wall on the nozzle of the instrument.

After some remarks by the PRESIDENT,

Dr. ROUTH proposed a recommendation to the Council of the Society to appoint a committee to report generally on the operation of transfusion.

Dr. CLEVELAND also hoped the Society might be enabled to give directions for facilitating the operation, and referred to a fatal case he had seen in consultation which, had it not been for the uncertainty of the operation, transfusion would probably have been performed, and perhaps a life saved.

The recommendation was carried unanimously.

Dr. HEYWOOD SMITH showed a modification of his Angular Scissors. The small scissors had curved blades, and when bent forwards would be useful for the removal of polypi, and, bent backwards, for cutting the sutures after the operation for vesico-vaginal fistula.

Dr. HALL DAVIS communicated a case of Inversion of the Uterus. The case came to the Middlesex Hospital ten months after labour. The patient was very prostrate from hæmorrhage. Ordinary efforts at reduction having failed, and the patient being much too weak for endeavours by sustained elastic pressure during consecutive days to effect reduction, the inverted organ was removed by the single wire écraseur. The patient was discharged convalescent on the thirty-third day. The inverted organ, which was exhibited, was much involuted; it contained parts of the ligaments, but not the ovaries.

Dr. BARNES read a paper "On the essential cause of Dysmenorrhœa, as illustrated by Cases of Menstrual Retention." The author sought, by comparison of different cases of dysmenorrhœa, to discover a common essential cause. Having discussed the question of "irritable uterus," and adverted to the evidence accumulated since the time of Gooch and Ferguson in proof that cases of neuralgic and

constitutional dysmenorrhœa were being gradually transposed under closer clinical analysis to the class of obstructive dysmenorrhœa, the author stated the proposition that the essential condition of a large proportion of cases of dysmenorrhœa was really retention of menstrual fluid. He illustrated this by several cases typical of various kinds of obstruction, and especially by some of congenital or acquired stenosis and atresia of the genital canal. For example, one was that of a healthy woman who never suffered dysmenorrhœa until after a severe labour, which was followed by sloughing of the vagina and gradual atresia by cicatricial contraction; as the constriction advanced dysmenorrhœa became more and more severe, until, the vagina being completely obliterated, the phenomena of complete retention ensued. When the vagina was restored by operation, the dysmenorrhœa was cured. So in cases of imperforate hymen, there was dysmenorrhœa from retention. Some points in the history of this affection were discussed. The term "amenorrhœa," usually applied, was bad; menstruation went on, it was occult and painful. The sources of danger and the modes of operating were considered. The cases of dysmenorrhœa from flexion and from stenosis of the os internum and os externum uteri were compared with those of complete atresia of the vagina, the common condition being in all retention of menstrual fluid. Other illustrations were adduced to show that retained fluid or clots in utero caused symptoms similar to those of dysmenorrhœa. The effect of stenosis and atresia in producing retrograde or ascending dilatation of the genital canal was shown, and the mechanism by which retained or injected fluids found their way through the tubes was attributed to the contractile efforts of the uterus excited by the pressure of the retained fluids. One condition submitted was that, if the most common essential condition of dysmenorrhœa was retention of menstrual fluid, search must be made for the cause of the retention in order to remove it. This conclusion was as logical as the necessity always recognised of giving exit to the menstrual accumulation in cases of complete retention from imperforate hymen. Dysmenorrhœa was incomplete retention. The indication was the same, only less imperative.

Dr. PLAYFAIR believed that clinical facts were not in accordance with a theory so seductive from its simplicity as that advocated by the author. He had no wish to throw the least doubt on the mechanical theory as explanatory of a large number of cases, but he believed that cases existed far more frequently than Dr. Barnes allowed where no obstruction could be found. He referred especially to the cases of so-called congestive dysmenorrhœa, and to those usually included under the class of ovarian dysmenorrhœa.

Dr. SNOW BECK said that nearly all acquired, as distinct from congenital, alterations of the uterine organs from a state of health, were attended with more or less increased pain during menstruation, and some affections of the neighbouring organs give rise to a similar increase of pain. He had no hesitation in expressing his belief that obstruction to the exit of the menstrual flow formed but a small proportion of the cases attended with increase of pain during menstruation, and that treatment directed essentially to this object would in the large majority of instances be attended with unfavourable results.

Dr. ROGERS also believed that dysmenorrhœa was not a disorder depending solely on obstructive causes. Many cases of dysmenorrhœa were cured before the theory of obstruction was first acknowledged. Many of the cases depended on ovarian, rectal, or purely neuralgic disorders. One cause of dysmenorrhœa, fundal endometritis, had been specially described by Dr. Routh.

Dr. TILT thought the most frequent cases of obstructive dysmenorrhœa were those in which the obstruction was clearly of a spasmodic nature. He had repeatedly met with cases in which dysmenorrhœa was intense, although the cervical canal was perfectly free, and the discharge of a florid colour and without clots. The dysmenorrhœa in such cases sometimes depended on chronic inflammation of the menstruating surface, sometimes on morbid ovulation and subacute ovaritis; whereas, in exceptional cases, the complaint could only be considered a neuralgia of the menstruating womb.

Mr. SPENCER WELLS believed that a very large proportion of cases of true dysmenorrhœa depended on mechanical impediment to the free escape of the menstrual fluid, and to be curable by removal of the obstruction. Sympathetic pains in the breasts or elsewhere, and nervous symptoms common at the menstrual period, should not be confounded with true dysmenorrhœa. He narrated cases in which severe obstructive dysmenorrhœa had been cured by replacement of the flexed uterus, by dilatation of the cervical canal, and by opening a closed vagina.

Dr. BARNES then replied.

Reviews and Notices of Books.

A Practical Treatise on the Diseases of Women. By T. GAILLARD THOMAS, M.D. Third Edition, enlarged and thoroughly revised, with 246 Illustrations on Wood. pp. 771. Philadelphia: Lea. 1872.

WHEN a work has reached its third edition within four years, it needs not a reviewer's pen to tell the world it is worth reading, nor scarcely to indicate its matter; but we should not be doing our duty to the profession did we not tell those who are unacquainted with the book how much it is valued by gynæcologists, and how it is in many respects one of the best text-books on the subject we possess in our language. Before we notice anything specially with regard to this edition, we would remark generally that the book possesses some features that will ever make it pre-eminently a practical work. Where there occurs in the text a list of either causes of disease, symptoms, physical signs, or points of differentiation in diagnosis, each separate condition is placed in a separate line, so that one can take in at a glance, e.g., all the causes of a malady in the order of their probability, or all the methods of treatment in the order of their importance. These lists attract the eye at once, and make the book very handy in reference to any point it treats of, and withal one most useful to the student, who will find it comparatively easy to remember facts about disease when presented to him unencumbered with collateral remarks. Again, the author is very careful to explain minutely the necessary details in the various operations and minor manipulations that the treatment of the diseases of women so constantly demands. His opinion, too, on the advisability or otherwise of any mode of procedure is usually very sound, and he particularly points out where operative interference would be hazardous. He everywhere upholds a high standard of professional ethics, characterised by great delicacy of feeling, and not the least praiseworthy part of his book is where he honourably refers to his own errors, with the view of warning others from similar mistakes.

In a branch of the profession, as far as regards its scientific practice, of comparatively recent growth, rapid strides are of course made from year to year which have necessitated additions and alterations in theory as well as in practice, so that this edition is larger by upwards of 150 pages than the first, and contains many more illustrations. We may remark, in passing, that of these some are familiar to us from works published in this country; the majority are well executed, except those where figures are introduced, which are rather a disgrace to the book. The volume itself is remarkably clearly printed, and possesses an advantage to which we would draw the attention of our English publishers—namely, that it is issued cut.

The author has added but little to the first three chapters, which are excellent, and should be carefully studied by every student of uterine disease—(I.) on the History of Gynæcology, (II.) Etiology of Uterine Diseases, (III.) on Means of Diagnosis. Written in a similar style is Chap. XII., which has been largely added to, and treats of uterine pathology in general and especially of inflammation. In the chapter on Chronic Cervical Endometritis there are

additional remarks on "Injections into the Uterine Cavity." In the chapter on Prolapsus Uteri, Dr. Thomas has introduced a new operation for Elytrorrhaphy which promises to be of use. The chapters on Versions and Flexions of the Uterus have both been much enlarged, partly by a more extended notice of various pessaries, though the list is by no means complete; and we recognise some named after fresh inventors, which shows that probably the same idea occurred to different practitioners on the two sides of the Atlantic. Dr. Thomas gives a drawing of an ingenious pessary of his own for anteversion and another for retroversion. At page 427 there is a very interesting account of an operation which the author performed for the relief of inversion of the uterus; it was successful, and is put forward as a good alternative for amputation, for by its means the uterus is restored to its natural state through an abdominal section instead of being lost; and, considering that a large proportion of amputations of the inverted fundus uteri end fatally, and exploratory incisions can now be performed with so little risk, the operation seems not only justifiable but to be recommended. In the chapter on Fibrous Tumours of the Uterus, the author contends that fibroid, or myo-fibroma, more correctly expresses the pathological condition. This is followed by a short chapter on Fibro-cystic Tumours or "Cysto-fibromata." The chapters on Malignant Disease of the Uterus have been very carefully added to, and partly rewritten. A separate chapter is devoted to Cancer of the Body of the Uterus, as also to recurrent Fibroid Tumours. On Ovarian Tumours there are added between thirty and forty pages. The history of ovariotomy is made more complete; a detailed account is given of a successful case of vaginal ovariotomy; a large space is devoted to the notice of the various methods of dealing with the pedicle in the ordinary operation, and of the different sorts of clamps. The description of the solid and composite tumours of the ovary is more elaborated.

We have left to the last the more careful notice of Chapter XVII., for the new name at the heading of which the author claims the indulgent consideration of the reader. He has substituted for "Chronic Metritis" "Areolar Hyperplasia, or Diffuse Interstitial Hypertrophy of the Uterus." In speaking of the pathology of the disease he describes, after giving the usually accepted account of so-called metritis, he quotes several authors to prove that the enlargement of the uterus thus observed is due, not to the products of inflammation proper, but to congestion followed by hypertrophy or hyperplasia of the connective tissue of the uterus. He differentiates hypertrophy and hyperplasia thus: "Hypertrophy signifies excessive growth of the elements of a tissue already existing; hyperplasia signifies the development of new tissue." He also says (p. 282): "If the disease really consists in a proliferation..... of the areolar..... tissue of the uterus, ... it would certainly be advantageous to apply to it some name which would signify that fact. 'Areolar hyperplasia' expresses this fact concisely." And further on: "Sometimes with hypertrophy of the areolar tissue there is likewise increase in the muscular." While we thank Dr. Thomas for so boldly coming forward to combat old ideas, and for his attempt to substitute a more scientific nomenclature for a somewhat vague term, he must forgive us for saying that we do not consider the pathology of this difficult subject even yet cleared up, though his remarks show that the stream is setting in the right direction, and will probably bear us to our required destination at last.

It appears evident from our observation that enlargement of the *body* of the uterus scarcely ever happens, save as a sequela of parturition. Enlargement of the *cervix*, however, does occur even in nulliparæ, after irritation from some cause or other—as, for example, working a sewing machine; showing that we have to deal with two different pathological states, and inferentially with two (we were almost going to say differently constructed) organs. In child-bearing women there is hypertrophy and hyperplasia of the contractile tissue of the body of the uterus, which from some cause, as want of tone, may not after labour sufficiently contract nor get sufficiently absorbed; the uterus then remains permanently enlarged, and this hyperplastic tissue is ever liable to congestion. From attentive microscopic examination of the uterus, we find that in the body connective tissue is almost infinitesimal; the hyperplasia must therefore chiefly be of the contractile tissue. But when we come to the cervix, we find that, there being less need of it, the contractile tissue is of much less amount, and the connective tissue exists in a larger proportion; it is here, then, that we get true "areolar hyperplasia," which becomes often, after a time, more dense, and gives rise to an induration of the lips of the uterus.

We are glad to see that there is springing up in our day a desire for truth in pathology, and an unwillingness to take for granted descriptions that have been handed down from a time when the means of investigating morbid and other anatomy were so limited. We sincerely hope that there may arise a greater earnestness of search among our gynæcologists, so that soon from British pens may issue such contributions to our knowledge of the microscopic anatomy of the female pelvic organs as may leave nothing further to be discovered. In referring to some portions of the book, we are surprised at the absence of all mention of vascular and other growths from the urethra, and tumours of various sorts of the vagina. Nevertheless, we have no hesitation in recommending Dr. Thomas's work as one of the most complete of its kind ever published. It should be in the possession of every practitioner for reference and for study.

The Origin of Species by Means of Natural Selection; or the Preservation of Favoured Races in the Struggle for Life. By CHARLES DARWIN, M.A., F.R.S., &c. Sixth Edition. London: John Murray.

No student of medicine should fail to read attentively Mr. Darwin's now classic essay on the Origin of Species—a work which, whether its conclusions be accepted or not, will ever remain a monument of scientific knowledge at once comprehensive, minute, and accurate; of reasoning powers trained to caution while preserving their elasticity and freshness; and of a style almost perfect for clearness, brevity, and philosophic candour. The present edition is issued at a price which brings it within the reach of all; and we doubt not that the rising generation will one day give proof of the advantages which a patient and intelligent study of such a book affords them over their less privileged predecessors.

The essay has undergone many modifications since its first appearance in the November of 1859. These, however, have mainly referred to matters of detail—matters not affecting the conclusions arrived at, but rather the illustrations adduced in their support. In the present edition a tabular list of the additions and corrections peculiar to it is given; thus supplying the reader with a sort of condensed view of the discussion provoked by the controvertible doctrines of the fifth. Of these the more important are the exposition of the influence of fortuitous destruction on natural selection; of the convergence of specific forms; of the modification of the eye; of the transitions through the acceleration or retardation of the period of reproduction; and, perhaps most interesting of all, the reopened treatment of the alleged incompetency of natural

selection to account for the incipient stages of useful structures.

An entertaining as well as instructive portion of the volume is the historical sketch of the progress of opinion on the origin of species previously to the publication of the first edition of Mr. Darwin's work. From this the reader will trace the dawn of the principle in the great mind of Aristotle ("Auscultationes Physicæ," lib. ii., cap. 8, s. 2); the further expansion of it by Buffon; then its remarkable development by Lamarck in 1801. After this the principle received many auxiliaries, whose contributions, however, sometimes amounted to a retrogressive movement; till finally it found its greatest exposition in Mr. Darwin himself. The candour with which Mr. Darwin owns his obligations to his predecessors, and particularly to Mr. Wallace, is characteristic of the high ethical tone which pervades the work; and might be imitated with advantage by not a few of his eager, not to say passionate, critics.

We have only to add the present edition is furnished with an excellent index and with a glossary of scientific terms. The latter is open to considerable improvements, being obviously the work of a man to whom etymology is an unfamiliar branch of knowledge.

SOCIAL SCIENCE ASSOCIATION.

AT a meeting of this Association on the 15th inst., Mr. A. HAVILAND, M.R.C.S., read a paper on the "Haunts of Typhoid and other Fevers in England and Wales." In the ten years 1851-60 there died and were registered under the head of typhus and other fevers in England and Wales, 84,121 males, and 88,337 females; total, 172,458. This is at the rate of 9·1 for every 10,000 persons living. In no district was there freedom from fever. All the coal districts are characterised by a high mortality, and have a fever death-rate of 13 per 10,000 and upwards. The districts near the sea have also a high mortality of from 7 to 9 per 10,000. The greater part of the country has a fever death-rate of from 4 to 10 per 10,000. Mr. Haviland's researches seem to prove: 1st. That an elevated country having an abundant rainfall and a watershed of hard rocks and good natural drainage, through which the water flows in torrents, and in which the spring water has to be sought at a considerable depth, are conditions opposed to the development of fever poison. 2nd. That the opposite set of conditions—viz., scanty rainfall, a gently sloping watershed terminating in a flattened district through which the rivers wind their way in a sluggish course, with shallow absorbent soil overlying a tenacious clay, and having shallow wells, are favourable to the development of fever poison. Towns on tidal rivers suffer from the effect of tide upon the sewer gases. Mr. Haviland finds that the poor take in fever with water, the rich with air.

The Chairman of the evening, E. Chadwick, Esq., C.B., observed that there were statistics and statistics, and he thought those of the lecturer more calculated to indicate the direction of future inquiries than to measure the extent of fever. Sir John Pringle observed that places with shallow wells were bad camping grounds, and the draining of towns and villages was calculated to raise the health of the people, as the drainage of the fields had already raised the health of the cattle.

Mr. Pears thought the distribution of fever had little or nothing to do with geology. In the chalk districts, all hilly, all with porous, absorbent, disinfecting rock, you have some districts with a minimum, others with a maximum of fever. He thought the mortality had a direct relation to the density of the population.

Mr. Haviland, in reply, stated that the registration districts were often very irregular, and that they made the want of uniformity more apparent than a closer examination proved it to be. It was necessary to take a broad view of the whole.

Foreign Gleanings.

TREATMENT BY COMPRESSED AIR.

CARBONIC-ACID GAS, instead of combining, like oxygen, with the white corpuscles of the blood which emerge from the spleen, lymphatic vessels, and lymphatic glands, remains in a state of solution in the serum of the blood. Its more or less ready elimination is dependent on the different amounts of atmospheric pressure to which the body is submitted. Confined rooms and low habitations may even increase the amount of this gas, and then oxygen cannot penetrate and effect its healthy action. This is remedied by a stay in elevated localities, when an invigorating change takes place.

Baths of compressed air may advantageously be used instead of repairing to mountainous districts, as shown for the first time by Tabarié, a French engineer. His essay on the subject was presented to the Academy of Sciences of Paris in 1838, and the author was rewarded in 1852 by that learned body, after the baths had had extensive trials. The system was carried out on a large scale at Montpellier in 1840, and especially at Lyons at about the same period by Pravaz.

Tabarié was led to his discovery by the fact of the discomfort felt by travellers on great altitudes when the air becomes much rarefied. It was natural to inquire what would be the effect of a contrary state of things—namely, *increased* pressure. It was found that the rising of the mercury for an inch only upon the manometer was immediately followed by more energetic respiration and circulation. The practical application of this was first exaggerated, and the method made no progress; for it was a mistake to expect good results from *considerable* pressure, as from 5° to 15° of the manometer are sufficient. In fact, the disturbance of the equilibrium between the atmospheric pressure of the apparatus and the open air is already a therapeutical measure, mostly useful, and sometimes the only one necessary.

There are two ways of using pressure: (1) Perturbation—namely the more or less rapid change from ordinary to increased pressure, and the return from the latter to the former; and (2) medicating action—namely, an increase of pressure steadily continued, and kept up for a variable time, about one hour and a half on an average. The second of these methods is most frequently employed. But the difficulty lies in determining the amount of pressure fit for a given patient, as regards his morbid condition, and the changes in his symptoms from one day to the other. M. Bertin, in his work "Clinical Essay on the Use and Effects of the Compressed Air Bath" (Paris: Delahaye, 1868), gives a sketch of the apparatus, and the manner of graduating the pressure of the air, the latter, under varying circumstances, being left cold or slightly heated.

M. de Vivenot, of Vienna, has published carefully noted phenomena obtained during the baths, as regards the expansion of the lungs, and says: "The result of the pressure submitted to daily for two hours is an increased exhalation of carbonic-acid gas, and, as a consequence, a greater absorption of oxygen."

M. Bertin states, in the work above alluded to, "The compressed air bath has two actions:—1st. By increased mechanical pressure it augments the tonicity of the capillaries, and may thus favour interstitial absorption. 2nd. It favours the introduction into the lungs of a larger quantum of stimulant—i.e., the absorption of an increased amount of air, and consequently of oxygen. These circumstances act through the lungs on the economy at large, and promote general renovation by improving nutrition and instilling vigour into the frame."

It should also be noted that a pulse of 110 falls to 70 and 80, and remains at this lower figure up to the bath of the next day. Nor should it be forgotten that the changes which compressed air effects on circulation and respiration must, by favouring the incessant renovation of organic tissues, determine corresponding changes in the function of nutrition. This position is proved by the development of the appetite during the treatment by compressed air and the increased weight of the body. This latter fact was

ascertained by M. de Vivenot, by means of experiments upon himself.

The benefits of this treatment are warmly and cleverly insisted upon by M. Raoul Le Roy, in a late number of the *Bulletin de Thérapeutique*, March 15th, 1872. An establishment of the kind might perhaps effect some good in this metropolis.

GRAFTING WITH RABBIT SKIN.

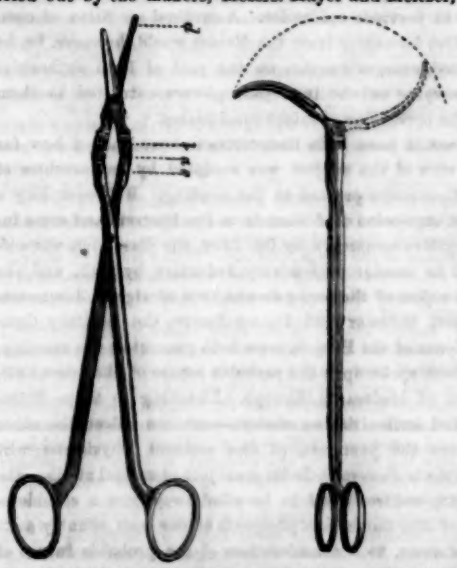
M. Coze, surgeon at the military hospital of Perpignan, has submitted to the Academy of Sciences of Paris three cases of obstinate ulcers which he succeeded in healing by grafting upon them cutaneous particles taken from the rabbit. M. Larrey, who presented the paper, thought so much of the successful issue that he proposed to place the essay before the committee appointed to award prizes to the best works on medicine and surgery.

New Inventions.

DR. HEYWOOD SMITH'S "ANGULAR SCISSORS."

OWING to our not having received the woodcuts in time, we were unable to insert them in their place in the report of the meeting of the Obstetrical Society; we therefore give them this week, with a short notice of the instrument.

Scissors with curved blades, by which a cut is made at an angle with the handles, are of some antiquity, and the principle of the double scissors is also not new; but the peculiarity of the "angular scissors" is that the small scissors can be used at any angle with the handles up to a right angle; and in the pair with curved blades (made since the meeting of the Obstetrical Society) the points may be made to cut in a direction exactly opposite to and parallel with the handles; while, if bent backwards, tissue or sutures can be cut, the handles being quite out of the way of the operator. Besides the pivot joints of the handles and scissors respectively, at the junction of the scissors with the handles is a somewhat complicated joint compressed into a small space, which has been very ingeniously carried out by the makers, Messrs. Mayer and Meltzer, of



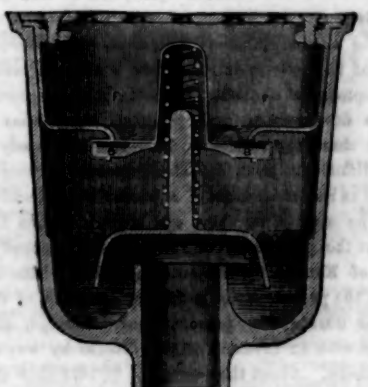
Great Portland-street. By means of the pivot joint (*b*) the small scissors are opened; *a* is the hinge joint, by which the scissors are flexed at the required angle with the handles; and *c* is a rotatory joint, necessary for the following reason: when the scissors are used quite straight, only the pivot joint comes into play (as in the ordinary double scissors); but when the joint *b* is bent, as each leg of the scissors describes an arc in a plane at a different angle to the arc described by each arm of the handles, and as these arcs are situate at a tangent with one another, and the points describing them are rigidly connected with each other, it follows that the point common to the two must describe an arc that must be the complement, so a portion of the arms of the handles rotates as an accommodation to the arcs described by the legs of the scissors. The director-point (*d*) would be of use in dividing the cervix uteri; for, in using scissors, it is difficult to guard and guide two separate points; whereas with these scissors the director-point can be passed into the os uteri, and the scissors then opened without the risk of their slipping or of wounding adjacent structures.

These scissors will be useful not only to the obstetric practitioner, but also in many surgical operations—e. g., those about the palate and throat. The curved ones doubtless may be of great service in some cases of polypi and difficult vesico-vaginal fistulæ.

WILSON'S PATENT DOUBLE-SEALED SINK-TRAP,

FOR KITCHENS, SCULLERIES, YARDS, STABLES, ETC.

THERE are many situations in which stench-traps are absolutely necessary. The objections to the common water-traps are—that they are liable to get dry; that the water in them still allows the sewer gases to pass through; and in bell-traps the top is generally loose, and is removed by



A is a spring pressing up the india-rubber-covered valve (B), so as to keep it air-tight, and which also makes it self-acting. B is the india-rubber-covered valve. C, Waste-pipe. D, Bell-top cover dipping in the water. E, The india-rubber covering the valve. F is a tray which, when about half full of water, opens the valve B.

the servants to facilitate the discharge of the water thrown down the sink. Mr. Wilson's trap removes the bell from the control of servants, and provides a dry valve if the water should be by any chance dried up. On these grounds it is superior to any others we have seen. It is manufactured by the well-known Carron Iron Company.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—The "William Brown Exhibition" of £40 per annum for three years, to the student showing the best general fitness for the exercise of the medical profession, has been awarded to Mr. Francis M. Evans. Mr. W. Wilson Coltart, the second in order of merit in the competition, has been presented with a special prize by Mrs. Brown, the founder of the exhibition, in acknowledgment of the excellence of his examination. The "Henry Charles Johnson Memorial Prize" in Practical Anatomy has been awarded to Mr. E. J. Spitta, and the Honorary Certificate to Mr. W. A. Frost.

THE LANCET.

LONDON: SATURDAY, APRIL 27, 1872.

AT the meeting of the Association of Medical Officers of Health on the 20th inst., in a paper on the prospects of this country as to cholera during the present year, Mr. NETTEN RADCLIFFE took occasion to review the history of the recent diffusion of the disease in Europe, and made an attempt to forecast the future of the diffusion. *Forecast*, the word used by Mr. RADCLIFFE, obviously in the sense in which it was applied by the late Admiral FITZROY to weather prognostications—namely, a scientific opinion founded upon data from which disturbing elements cannot be eliminated,—may be commended to the prophetically inclined among epidemiologists. In this sense, the word aptly represents the limits within which epidemiological prevision should be restrained, and its general adoption by epidemiologists might be advantageous, if, following the example of Dr. BEYDEN, a proclivity to prediction should become common among them.

Mr. RADCLIFFE discussed the prospects of this country as to cholera during the year—first, with reference to the facts of the recent diffusion; and, next, with reference to the state of the country in respect to conditions favouring the development of cholera. He holds that the recent diffusion, in development and progress, approaches more closely in character to that of 1852-55 than of any other previous diffusion. Both diffusions apparently originated in Europe as recrudescences of a preceding epidemic; but in both, he maintains, there are cogent reasons for the belief that the phenomena of recrudescence masked a new invasion of Europe by cholera from India. He infers, therefore, the probability of a further extension of cholera in Europe during the present year. Europe, also, is threatened with an invasion of the disease by way of the Mediterranean. About the same time in 1871 that cholera began to spread actively in Northern Europe, the disease also broke out at the head of the Persian Gulf, and extended widely in the province of Bagdad. Early in the summer of the year a Turkish expeditionary force, which had contracted cholera at Bassora, carried the disease into Eastern Arabia; and a caravan conveyed it also to Hayel in Northern Arabia. From Hayel the malady spread successively to Khaiber and Medina; and in November it appeared in Mecca, and the disease was present there, it is asserted, when pilgrims were beginning to assemble for this year's pilgrimage. Later in the year Gonfudah was attacked, and cases were reported at Jeddah and Yembo. Egypt is thus gravely threatened, and through Egypt Southern Europe. We await with some anxiety authentic reports of the state of health of the pilgrim caravans returning homewards. The reports already received are contradictory. Our most recent information is to the effect that the vessels carrying pilgrims which had reached Suez from Jeddah carried foul bills of health, and that the Egyptian Government was exercising the most energetic quarantine measures against them.

With cholera probably now about to become active in Northern Europe, and Southern Europe threatened with a fresh invasion of the disease by way of the Mediterranean, unquestionably the prospects of the Continent with regard to the epidemic this year are gloomy. The position of this country in respect to the epidemic Mr. RADCLIFFE considered, first, from the point of view of previous outbreaks, and confessed an inability to offer an opinion. He remarked that all general diffusions of the cholera here had hitherto been preceded by outbreaks of the disease in the year previous to that of the general diffusion. Cholera had been twice imported into England last year, but there had not been any outbreaks of a character similar to those which preceded the diffusions of 1832, 1847, 1854, and 1866. Dr. BUCHANAN, however, pertinently observed, in the course of the discussion which followed the reading of Mr. RADCLIFFE's paper, that, if cholera should spread in England in the course of the present year, it would be precipitate to assume that this was the second and not the first year of an epidemic outbreak in the country.

Mr. RADCLIFFE's observations on the state of the country in respect to conditions favouring the development of cholera were substantially in accordance with the opinions which have been expressed by THE LANCET. He stated that the permanent sanitary works which had been carried out in the *cholera-fields* of previous epidemics, the improved state of the law as to the abatement of nuisances and the preventive dealing with infectious diseases, and the better sanitary organisation of urban districts since the epidemic of 1866, all tended to the conclusion that cholera, if again introduced into England, would meet with local causes capable of fostering its development in less amount than in previous epidemics. A cardinal condition of comparative immunity from the disease would, however, be, he insisted, energetic action on the part of local authorities for carrying out the important powers entrusted to them for the prevention of infectious diseases.

It would have been instructive to have learned how far this view of the subject was accepted by the members of the Association present at the meeting. But, excepting a slight expression of dissent from Dr. DRUITT, and some interrogative comments by Dr. TIDY, the discussion was suffered to wander into a very seductive by-path, and the main object of the paper dropped out of sight. Inspector-General MURRAY and Dr. DE RENZY, the Sanitary Commissioner of the Punjab, were both present at the meeting, and both spoke upon the probable source of the recent diffusion of cholera in Europe. Listening to these distinguished authorities on cholera—one the oldest, the other perhaps the youngest, of the eminent physicians who have made cholera in India a subject of special study,—the meeting suffered itself to be wiled away from a consideration of the immediate prospects of our own country as to the disease, to a consideration of the probable future of India under the energetic measures now being taken to amend the water-supply of its population—measures which Dr. DE RENZY has taken so considerable a part in initiating.

THE Licensing Bill of the Government has of course been anxiously expected, not only by the large number of persons who are directly or indirectly interested in the profits of the liquor trade, but also by the far larger number who are desirous to remove some, at least, of the evils with which that trade has become associated in the public mind. Lord KIMBERLEY, by whom the Bill was introduced into the Upper House, in a very clear, able, and temperate address, frankly enough confessed that it was not ambitious in its character, and that it aimed chiefly at the control of manifest abuses. He confessed, further, that the elaborate system of licensing which he described was in direct opposition to the report of Mr. VILLIERS's Committee, which recommended that the sale of intoxicating drinks should be left free; and he did not conceal his own assent to the wisdom of the recommendation, at least from certain points of view. Still, he said, public opinion was in favour of a well-regulated monopoly; and it is well known that the Ministry entertain a humble view of the nature of their own functions. It is not for them to seek to lead opinion, or to instruct people from the vantage-ground given by access to the most extended information; but rather to follow at a modest distance in the wake of those who observe and think, and to frame little compromises between the parties to the eternal strife of good against evil which rages in the world. Fortunately this policy does not stand in the way of accepting suggestions for improvement made to them by others, when not of a kind to call forth active opposition; and hence we may always hope that the shortcomings of a Government measure may be amended in committee. It therefore behoves all persons who are concerned (and who indeed is there that is not concerned?) to look at the Licensing Bill with a view to the improvement of its provisions, and to urge any suggestions that may occur to them upon the notice of members of Parliament. There are probably none who have such opportunities of observing the ill-effects of public-houses as the members of our own profession; and there is no class of men more likely, if indeed so likely, to point out practical flaws in a measure by which these ill-effects are to be controlled.

With regard to the licensing question, it seems to us that all forms of magisterial discretion with respect to the granting of licences would be liable to be abused. No one supposes that publicans will multiply in excess of their means of living, or that liquor-shops would be opened, or at least continuously carried on, in any number greatly larger than the demands of the public would require. But, on the other hand, there is a real danger lest, if the trade were free, large numbers of liquor-shops would be made sources of profit subsidiary to some other calling. To a certain extent this is the case already; and there are at least many beer-houses, if not public-houses, from which the master and licensee is almost constantly absent during the day. The business is thus left to the management of his wife until the evening; and the margin of profit over expenses, however narrow it may be, is still something added to the resources of the family. If it were possible, as a rule, to forbid this sort of thing, and the indefinite multiplication of drinking-places which it might produce, it is probable that no harm would follow from allowing a public-house to be opened by anyone who wished to engage in the trade; subject of course to police regulations about hours of closing and orderly conduct, and to disqualification as a penalty for disregard or violation of the law. If every man of sufficient character and substance were licensed as a matter of course, on the condition that he should actually manage his business himself, there would probably be no more beer-shops than at present, and those which existed would no longer be held under a sort of implied guarantee of their valuable privileges.

Another point to which the attention of the Legislature might be directed with advantage would be the fostering of houses where drink was sold to be carried away, in contradistinction to those where it is sold to be consumed. One used to see, in former times, the words "Not to be drunk on the premises" on many a village signboard; and it is by means of the drinking on the premises that beer-shops chiefly demoralise. No man would be the worse for sending out for a pot of beer to be drunk at his own fireside, and to be shared with his wife and children, if only for the reason that he would be little likely to send for more when the first supply was finished. But, in the beer-shop itself, one pint too often leads to five or six in succession, until the hard-earned and sorely-needed wages are squandered, and trouble and privations entailed upon the family at home.

Nearly kindred to this part of the question is that of adulteration, on which Lord KIMBERLEY spoke in a manner well calculated to amuse all who understand the question and the common practices of the trade. He read to the House of Lords an account of the way in which beer was actually adulterated with water, and with coarse sugar, and with a very small bit of copperas to give it a head, and was then fined by some preparation made from fish-skin, and supplied by brewers for the purpose, and was drunk by confiding customers almost immediately. He said nothing of the way in which the beer thus weakened is rendered intoxicating by poisonous drugs, such as tobacco and cocculus indicus, with other admixtures that only "brewers' druggists" understand. The base and cruel frauds of the publican and the brewer would be impossible without this assistance; for the consumers of beer, in many places, have learned to take its power of fuddling them as the measure of its excellence. Lord KIMBERLEY did not tell the House how he meant to repress even the comparatively innocent adulterations that he described; but he distinctly pledged himself that their repression should at least be aimed at, and, *a fortiori*, he must also endeavour to prevent the use of the poisons which now form part of the poor man's drink. Lord KIMBERLEY rightly said that, under present arrangements—that is, under the existing reign of brewers,—the publican could not live by his trade if he did not adulterate; and we believe that, in many cases, he could not live if he did not adulterate poisonously. If beer were only watered and sweetened, and then cleared by coarse isinglass, nobody would have the least desire to drink it. The addition of salt is necessary in order to create thirst, the addition of a narcotic in order to abolish self-control. To deal with

these abominations successfully would not only be a difficult task, but would be the greatest piece of statesmanship that has been accomplished in England for a century. If Mr. GLADSTONE's Government can carry into law a Bill that will really regulate the liquor traffic, pruning away its associated evils and abuses, and leaving its usefulness and its convenience untouched, they will earn a lasting claim to the gratitude of their fellow-countrymen.

THE subject of Diseases of the Heart is one of great interest, both practical and pathological. It is, comparatively speaking, a new subject. The older pathologists gave the heart itself very little consideration. There was only one criterion to them of its action—namely, the pulsation of the radial artery. Almost their whole attention was given to the blood which the heart pumped through the body: the condition of the pump itself was almost ignored. The diseases of the lungs were not so much overlooked. They rendered themselves more palpable by various objective symptoms, although the differentiation of the various diseases of these organs was only accomplished by the discoveries of LAENNEC, which have also enabled physicians to test the condition of the heart by various physical methods. It is very interesting to notice how little is made of the heart by older authors. HEBERDEN discusses palpitation, and obviously regarded it as occasionally having relations with grave constitutional states, such as those produced by too much care and business, asthma, gout, and general failure of the powers of life known by the name of a broken constitution. He gives, as an appendix to his Commentaries, an interesting paper entitled "Remarks on the Pulse," in which he expresses himself dissatisfied with the minute distinctions of the several pulses made by physicians, saying that they do not exist save in the imagination; and suggests that they should attend only to such circumstances concerning the pulse as cannot be misunderstood, and he specifies the frequency of the pulse as a circumstance that could be accurately noted and should be chiefly attended to. HEBERDEN clearly sighed for accuracy, and thought this quality could attach only to observations of the number of pulsations. CULLEN scarcely seems to have thought of the heart as an organ capable of being affected with structural disease.

The detection and differentiation of the diseases of the heart; the relation of the most common of these to acute rheumatism; the study of morbid changes in the muscular structure of the heart; and the perception of the high importance of attending, even in cases of valvular disease, largely if not mainly, to the condition of the muscular tissue,—these are a few of the most characteristic and creditable points in the medical work of the present century. It is curious that HEBERDEN, who, with great sagacity, as we have shown, specified the serious constitutional condition with which palpitation was frequently associated, contrived to leave out rheumatism. The honour of the discovery of the connexion of acute rheumatism with inflammations of the heart is, we believe, due to Dr. DAVID PITCAIRN, who first noticed the fact in 1788; but it was not till Sir D. DUNDAS's account of the disease called "rheumatism of the heart," in 1809, that this great pathological relation was made distinct which is now so well understood by every tyro in medicine. The detection and differentiation of heart-disease could not have advanced as it has done apart from the introduction of the stethoscope by LAENNEC. But it is gratifying to know that English, Irish, and Scotch physicians have greatly distinguished themselves by their labours in this branch of pathology, especially that the researches of PITCAIRN, DUNDAS, BRIGHT, LATHAM, and HOPE have been brilliantly continued by STOKES, CORRIGAN, GRAVES, QUAIN, GEORGE JOHNSON, RICHARDSON, FOTHERGILL, and a host of others.

It is not our intention to pursue this line of thought further. But if anybody doubts the progress of medical science let him compare the knowledge possessed by physicians in the beginning of this century of the morbid conditions of the heart with the knowledge possessed by physicians now, and he will admit that the advance is enormous. An ungenial critic may say, *cui bono?* To what end is all the elucidation of the different lesions of the different tissues if it does not lead to a more enlightened and efficient treatment? But this is just what it does lead to, and there can be no doubt that the medical treatment of diseases of the heart is much improved. It is especially improved in two or three respects. In the first place, much more attention is devoted to other local disorders and to the constitutional states with which heart-disease is associated. By a proper medical regard to these the suffering heart is often either completely relieved or greatly improved. Secondly, the physician of the present day directs his treatment to improving the vital tissue—the muscle—of the heart, and does not aim at impracticable alterations of the condition of the valves. He knows that much may be done to nourish, to rest, to save the muscular tissue, and his treatment has these objects chiefly in view. Moreover, the use and action of cardiac medicines are much more accurately defined than they were. Surely, too, we may hope that, despite the sceptics, a better treatment of rheumatic fever does tend to save the heart—to save its muscular tissue if not its valves. There is a third grand advantage in modern medicine. It can take a more hopeful view and give a more hopeful prognosis. We do not think it necessary to imitate that physician of whom Dr. STOKES has somewhere spoken, who, on hearing a bruit in a patient's heart, who up to that time had been working very well notwithstanding his bruit, said: "Sir, I hear your death knell"; and so felled the patient with prognosis. We see too much of the recovery of heart-power by rest, food, and proper medicines; we know too many pulses that are beating happily now that we knew to intermit or to be irregular years ago. We know on such authority as that of Dr. STOKES that the patient with heart-disease does not, in the great proportion of cases, die suddenly, but gradually, and with a failure that may by care on his part and a due regard to medical hints and helps be greatly retarded and averted. On such grounds as these heart-disease has come to be a creditable and hopeful chapter in medical science.

TELEGRAPHIC advices from Berlin, dated the 24th inst., report that Asiatic cholera has broken out at Kamienck, in Poland, and that 21 deaths had taken place in nine days.

Medical Annotations.

"Ne quid nimis."

SANITARY INSPECTION BY POOR-LAW MEDICAL OFFICERS.

NOTWITHSTANDING the objections which have been urged against the employment of Poor-law district medical officers as officers of health, we must repeat our conviction that we are advancing their interests and the general interests of the profession also in supporting the proposition for their employment in that capacity. We believe that in sparsely populated districts, where the Poor-law medical officer is the sole resident medical man, where he enjoys the respect and esteem of rich and poor because of his personal services to both, no one is so well qualified to persuade the proprietors to remove prevailing sanitary defects. In many cases he does his best now, and it cannot be doubted that his efforts would be more successful if he were authorised to interfere officially, for he would not then be open to the objection that he is interfering with matters over which he has no control.

Where the Poor-law medical officer is struggling for bread, and feels his dependence on the goodwill of his neighbours, there is not, and cannot be, a law compelling him to alter his present contracts without his free consent. It would, however, be a great misfortune if he were to refuse on that account a duty which, if performed with reasonable tact, would not fail to advance his interests and improve his social position. We do not expect, nor do we want, a set of Quixotic officers to run an immediate tilt against the thousands of sanitary defects which have grown up in the ignorance of past or the selfishness of modern times; but we do desire that the influence of the profession of which the Poor-law medical officers constitute so large a part shall be officially utilised for the purpose of gradual enlightenment and improvement. We cannot afford to leave sanitary administration to lay inspectors of nuisances or *dilettante* chairmen of health committees; and it seems to us that we should be grossly neglecting our duty as guardians of the interests of the profession if we failed to insist upon the desirability of keeping the general control of public health administration in medical hands. It is our right as the pioneers of preventive medicine; it is a right that the public will not grudge, because they respect the disinterested motives by which the profession has been actuated, and we rely upon the profession to respond to the call made upon them, and to qualify themselves with the object rather of persuading than of compelling their neighbours to adopt adequate measures for improving the health and augmenting the wealth of the community.

ANTI-VACCINATORS.

WE have long since come to the conclusion that reasoning and common sense were thrown away when used to convince anti-vaccinators. A man who does not see that vaccination, whatever the slight objections to it, is a great boon, and capable of being made, if freely and repeatedly used, a perfect preventive of small-pox, is mentally peculiar or defective. He might be expected to argue that, seeing that a railway accident happens occasionally, people should not travel by rail; and, seeing that plenty of fresh air occasionally involves a fatal draught, therefore employers should not be compelled to procure well-ventilated rooms for their employés, but allow them to labour in closeness even till consumption overtakes them. So we do not intend our remarks for the professional anti-vaccinator, but for sensible people who wish to do what is best for themselves and their children. We notice that in some parts of the country large placards are printed, containing extracts from the remarks of many medical men as to the possibility of conveying other diseases with vaccination, in connexion with a few cases of a suspicious character which happened among the hundreds of thousands of vaccinations which took place last year in London. Very few medical men deny the possibility of conveying other diseases with vaccination from an unhealthy child. But they are careful to vaccinate from healthy children. The very extracts that we see in the placards which occasion our present remarks show that the possibility of such an accident in vaccination is a moot point, though one generally conceded in the abstract. What is maintained by these doctors and all sensible people is, that the accidental conveyance of other disease is so rare, and so easily avoidable, as to be no argument against vaccination, or the propriety of compelling people to have their children vaccinated, and of encouraging revaccination in the interest of the State — procedures tending to prevent a most loathsome and a very deadly disease, which will probably go on making havoc among every badly vaccinated community in the country for two or three years yet to come if honest working men listen to the clap-trap of those who are engaged to abuse vaccination. Only doctors can gain by the neglect of this little and innocent operation; for they will have work enough to do in attending cases of small-pox. Let it be clearly understood that the doctors quoted by the anti-vaccinators all get vaccinated and revaccinated, and have their children vaccinated, and recommend vaccination and revaccination.

CORONERS AND MAGISTRATES.

WE have more than once lately had occasion to remark on the excessive folly of any endeavour by magistrates to investigate the propriety of inquests that have actually been held by coroners, and we see that this folly has lately been repeated at Salford on a scale of unusual magnitude, some dozen inquests having been disallowed. Now, the whole value of the inquest as an institution depends upon its power to impress the public with the belief that an inquiry will be made into every case of death about the causes of which there can be any doubt; and, where the doubts are dispelled by inquiry, and the causes are shown to be natural, such a result should be a matter only for congratulation. The coroner is not primarily an officer for the discovery of criminals, but for the clearing up of uncertainty, and his inquisition is to determine "how and by what manner of means A. B. came by his death." It is very easy for silly country justices to say that, after all, A. B. only died of heart disease or apoplexy, and that there was no occasion for an inquest. The occasion would be to determine the very point on which these wiseacres after the event lay stress; and the effect of their proceedings, if generally copied, would be that carefully planned murders would remain undiscovered; no inquest having been held lest the cause of death should turn out to have been natural. We commend the proceedings of the Salford justices to the attention of the Lord Chancellor.

PUBLIC GRATITUDE FOR PUBLIC SERVICES.

No one perhaps is better known for excellent sanitary work, at least in the suburban districts of the metropolis, than Dr. Alfred Carpenter, of Croydon. For years past he has with remarkable industry and judgment personally laboured to promote the health of Croydon, and to his exertions the sanitary improvement of the place is eminently due. But the gratitude which the public feel towards

sanitarians is sometimes shown in a curious manner, and Dr. Carpenter, in return for the good he has done the people of Croydon, instead of being placed as usual at the head of the poll as a member of the Board of Health, has been ousted by the votes of the ratepayers. We have received a number of communications upon the matter, and the proceedings of the ratepayers are given at length in the local press. The real reason for the present antagonism to Dr. Carpenter seems to lie in his having tried and succeeded in getting healthy dwellings for the poor; the landlords, in consequence of the expense they have been put to, have, however, raised the rents, and the onus thereof has been saddled upon Dr. Carpenter's back, and his opponents having embittered the lower orders against sanitary work, the result has been that the small holders voted against him. We are glad, however, to be able to state that Dr. Carpenter has lost nothing by his non-election, for since that event he has been sworn in as a magistrate of Surrey, and his opportunities for enforcing sanitary law against sanitary evils will be much greater, especially in relation to the new Public Health Bill, when it shall have become law. The foolish people of Croydon will no doubt yet learn that the step they have recently taken is not one likely to advance the material interests of themselves or their town.

THE COST OF SANITARY WORK AFLOAT.

SINCE we referred to this subject in an annotation in THE LANCET of the 13th instant, the magistrates of Waterford have attempted to justify the course of action that they pursued last year in saddling the master of a vessel with fees for medical inspection. Although the matter was in this case settled provisionally by Lord Granville, it is evident that the present condition of the law on the subject is very loose, inasmuch as another case, involving the same principle, occurred some few weeks ago at Shields. The captain of the *Monkshaven* engaged his crew at the shipping-office on the 9th of February, and it was agreed that they should commence work four days afterwards. Work was begun accordingly, but on the 15th it was discovered that one of the seamen was suffering from small-pox. The captain landed the man, applied to the police authorities for an order to the small-pox hospital, but was compelled to pay £5 before the patient was admitted, and was told by the magistrates that he was legally responsible. A correspondence was hereupon commenced between the captain of the vessel, the Board of Trade, the Shields Local Marine Board, the Tynemouth Local Board, and the Local Government Board; and from none of them has any satisfactory reply been received. Shipowners and shipmasters very naturally object to pay for the prevention of disease among any particular section of the community over and above their fair share of local taxation; and it appears to us an unsound item in the system so admirably inaugurated and carried on by the Tyne sanitary authorities that the hospital now established should in the ordinary sense of the term be self-supporting. We must infer, however, that the balance of law, as it now stands, is in their favour.

Hence, if cholera comes to us this year, and Mr. Stansfeld's Bill is not in action, the question as to who is to pay will be raised continually, and we may prophesy pretty confidently that the port of London will be a chief arena for discussions of this nature. The Commissioners of Sewers are about to present a report to the President of the Board of Trade indicating, among other things, that the waterside districts should not be called upon to pay the sanitary expenses of the port, but that the entire metropolis should be rated. There can be no reasonable doubt that this view of the matter will be adopted by the Government; but inasmuch as the execution of the Orders in Council, dated July 29th and August 3rd, 1871, respectively, has been, and is likely to be, hampered by these financial disputes, it is specially necessary that the law should be at once decisively and authoritatively defined.

THE FORCEPS IN MIDWIFERY.

DR. J. THORBURN, Lecturer on Midwifery and Diseases of Women, Manchester, has published in pamphlet form "Remarks on 113 Cases of Forceps Delivery," with, strictly speaking, only one maternal death. In a second case of death the mother was dead before the forceps were applied. The sole maternal death after the forceps was that of a middle-aged primipara after a tedious labour of about thirty hours, with adherent placenta that had to be extracted. On the third day adynamic peritonitis set in, of which she soon died. The maternal mortality from the instrument, in this series of cases at least, seemed *nil*. In 103 of the cases where delivery was effected by the *forceps alone*, the infantile fate was as follows:—85 were born alive, 14 dead, and 4 unaccounted for, but probably alive. These 4 excluded, the mortality of children was 14·1 per cent.; 9 of the 14 Dr. Thorburn attributes to the severity of the labours, and considering how fatal any prolonged delay in the second stage is to the child, especially in primiparæ—the proportion of which in these cases, by the way, is not given,—he is probably right. The forceps were applied at or above the brim in 23 cases, in the pelvic cavity in 42, and at the outlet in 48. The maternal lesions were slight, except in one case, with the face forwards, which would not rotate. The choice was between destroying the child and using force that rent the perineum. The child was saved, and the perineum healed without permanent fistula. The chief reasons for using the forceps in the cases were a slight disproportion between the propelling force, the pelvic space, and the bulk of the fœtus (48 cases); decided want of expulsive force (22 cases); and (in 19 cases) decidedly deficient space, &c. This series of cases only goes to enforce the established doctrine that the forceps is a most safe and valuable obstetric instrument when used with anything like care and propriety. Indeed this belief is so general now among British authorities that it appears to us that the time has come for asking of all candidates for obstetric diplomas certificates that they have seen a few cases of delivery by the forceps.

MEDICAL INSPECTION OF SEAMEN.

IT is proper to direct attention to this subject once and again, because recent experiences in the Greenland seal fishery have fitly furnished us with a text. The last advices from Dundee report that soon after the ship *Narwhal* reached the fishing grounds small-pox broke out among her crew. Six men were soon confined to their berths, and according to a paragraph that has been going the round of the daily papers, "but for the continuance of a severe frost during the whole time the fleet remained at Greenland, the results might have been terrible." It is possible that the writers of this paragraph, as well as a large proportion of the readers thereof, may not be aware that legislative means exist that were expressly enacted with the view of preventing these terrible results, results which might have proved "terrible" to the pockets of the Dundee shipowners as well as to the crews of their ships. The 10th Section of the Merchant Shipping Act of 1867 provides for the medical examination of seamen, before signing articles, by an official inspector, at the rate of 2s. per man. The instructions issued to these inspectors by the Marine Department of the Board of Trade direct, among other things, that the men

shall be examined as to vaccination, so that a ship-captain would be acting sensibly in declining to take any unvaccinated seamen. Indeed, there is no doubt that the crews of these fishing vessels ought to be all vaccinated before going to sea. The masters of the Grimsby smacks, comprehending the risk incurred last year in shipping hands for the spring and autumn work when small-pox was rampant in the town, called upon the Board of Trade medical officer to inspect all their seamen at the shipping office before they started, and more than 200 were examined. But with this exception, and some few cases at various outlying ports, this section of the Act is still a dead letter, and the Local Marine Boards in London and Liverpool have not, up to the present time, even taken the trouble to appoint an official inspector.

PRACTICAL PHYSIOLOGY IN RURE.

SOME little while ago a great deal of virtuous indignation was expended, chiefly by anonymous writers in the daily press, on certain alleged acts of "cruelty" practised on dumb animals by professors in their physiological demonstrations. Of course "cruelty"—that is, the infliction of needless suffering—is always to be sternly condemned. But the complainants in the case referred to, were, we make bold to say, in the belief of all reasonable people, nonsuited in the court of public opinion. The recent stir among the agriculturists has, however, recalled attention to a social physiological experiment, not on rabbits, but on human beings—carried on, not under the merciful agency of anæsthetics, but under circumstances calculated rather to quicken sensibility. The experiment consists in endeavouring to ascertain how long a certain number of people can subsist on *tenpence a week each!* This real but almost incredible cruelty is thus testified to by Mr. R. Arthur Kinglake, a magistrate for Somersetshire:—"Having visited a house where severe illness existed, I was induced to inquire into the means and circumstances of the family. I found the husband to be a farm labourer, having 8*s.* per week, with three pints of cider, to maintain himself, wife, and four children; so that, deducting 2*s.* rent, 1*s.* fire and candles, only 5*s.* per week remain to support father, mother, and four children, or at the rate of 10*d.* each per week for all purposes." We would venture to suggest that the tender-heartedness which was so violently excited by the imaginary squeak of a pained guinea-pig might with at least equal propriety be aroused by the piteous wail of masses of human beings suffering the tortures of chronic starvation.

LOCAL TAXATION.

THERE is now every indication that the Government will be compelled to make some concession in the relief of local taxation, and although Mr. Stansfeld was not prepared on Tuesday to state in what way, and to what extent, assistance is to be given, he promised to inform the House on an early opportunity, when the Public Health Bill is considered in committee. The medical profession is deeply interested in this very important question, for so long as remuneration for medical services, and particularly for sanitary services, is left to the uncontrolled ignorance and parsimony of local boards, there will be little hope of obtaining proper salaries, or that efficient support from the central authority which is necessary for a firm discharge of duty. We have always regarded the part payment from the Consolidated Fund of the salaries of all administrative officers as the only sound method of influencing local action. The whole country is interested in raising the efficiency of the administrative staffs, whether lay or medical, and although we do not advocate such a perpetual interference with local action as now exists in the Poor Law, we are of opinion that the Local Government Board should enjoy the power of refusing the grant from the Consolidated Fund whenever their inspectors fail to secure, by proper representations to the local boards, the appointment of good officers, the requirement of actual service, or the payment of sufficient salaries. The principle is not novel, and in the industrial and pauper schools works admirably. When the managers propose to effect a job, and put some incompetent person in a place, the inspector interferes. He says, "Gentlemen, you can of course appoint this person if you choose; but as I consider him unfit I cannot allow any portion of his salary to be paid from the Consolidated Fund." Or suppose they desire to offer an inadequate salary; the inspector then tells them his opinion, and says plainly, "If you give so much only, gentlemen, you must pay the whole out of your pockets; but if you give so much as will enable me to complain with justice if the work is not properly performed, I shall recommend the Local Government Board to assent to a moiety being paid from the Consolidated Fund." We hope, therefore, that this equitable mode of influencing local administration will be adopted by the Government, and we are sure that the medical profession will reap the advantage of having the countenance and support of a power capable alike of appreciating and rewarding their labours.

VALUE OF QUININE.

IT is refreshing in sceptical times like these to have evidence of the value of medicines. The value of quinine will be admitted by the most *laissez faire* practitioner, though different illustrations would be given by different physicians. Those who have practised in malarious districts at home or abroad would tell the most eloquent facts. Not the least interesting cases would be those of persons labouring unconsciously under some unsuspected or vague form of malarial poison, going about the world miserably until some shrewd physician guesses at the malarious character of their malaise, and tests his diagnosis by therapeutics. The relief of the various neuroses, including herpes zoster, would be adduced. The power possessed by quinine of lowering temperature, illustrated very lately in our columns by two cases of typhoid, would appear to some minds the most striking control over vital processes. More matter of fact people still would be impressed by the exchanges of quinine. Mr. MacCormac tells us, in his interesting account of his Ambulance experience during the late war, that a colonel, the Marquis de Galliflet, asked him if he could give him some quinine as he was suffering from an accession of African fever brought on by heavy rains after the collapse of Sedan. Mr. MacCormac gave the quinine, and the marquis begged him in return to accept his beautiful Arab horse. We have been informed that in the Mauritius the price of quinine at one time lately, during the prevalence of fever, reached £28 10*s.* per ounce.

VERY LIKE SPONTANEOUS GENERATION.

DR. J. C. DALTON, the well-known Professor of Physiology at New York, recently delivered two lectures at the College of Physicians and Surgeons of that city on "Spontaneous Generation," an abstract of which appears in the *New York Medical Journal* for February last. The lecturer considered his subject mainly from the historical aspect; his object being to offer an account of the progress of opinion and discovery from the earliest periods, and the present condition of our knowledge in regard to it. Adverting to the inherent difficulty of the subject, and to the very pardonable mistakes made by the earlier naturalists, Dr. Dalton

remarks that there is no point connected with the habits of animals surrounded by so many obstacles to a complete elucidation as that of their reproduction. The deposit of eggs in one season, which are not hatched until the parents are dead, or have disappeared, for example, Prof. Dalton illustrates by the case of an American locust (*Cicada septendecim*). A period of seventeen years elapses between the hatching of the larva and the appearance of the perfect insect, the larva all this time remaining buried in the ground, while the life of the insect in its perfect state does not last over six weeks. A brood of these locusts appeared in the city of New York in 1843, and again in 1860. If they return, the Professor remarks, with their accustomed regularity, their next appearance will be in 1877.

THE GLASGOW MEDICAL SANITARY STAFF.

PROFESSOR GAIRDNER has written a very dignified and important letter to the Lord Provost on the changes contemplated by the Police Board in the sanitary department of the city, with a view to a reduction, not of the large mortality of Glasgow, but of expenditure. According to Dr. Gairdner, the entire cost of the existing medical staff is £740; and the committee propose to save £140 under a new system, the essential feature of which will be the dismissal of Dr. Gairdner and the appointment of a medical officer prepared to give his entire time to the duties. The whole medical world will doubt the economy that would save £140 a year in Glasgow by losing Dr. Gairdner; and Dr. Gairdner shows in his letter that he has medical colleagues on the sanitary staff, conspicuously Dr. McGill, whose services have been invaluable to the city, and who will be disparaged by the proposed changes. Dr. Gairdner cannot be a loser. Relief from grave and often thankless sanitary duties will doubtless enable him to develop his just reputation as a physician and a medical teacher of a very high order. But Glasgow can scarcely fail to suffer in losing the services of such a staff with such a leader, and in making these changes, as appears from Dr. Gairdner's own account and that of an esteemed correspondent, without adequate consideration to those whose labours in many a past epidemic crisis entitle them to very different treatment.

CANDIDATES FOR CORPORAL PUNISHMENT.

FOR many years we steadily used every effort to get corporal punishment abolished in the public service, and it may sound somewhat paradoxical to say that we now advocate in the service of the public the application of corporal punishment to a class of people who seem to us to richly merit it. Hospital surgeons have frequent opportunities of witnessing the injuries received by poor women who have the misfortune to be united in a bondage for life to brutal husbands. A medical officer at one of our ophthalmic hospitals lately called attention to the subject, and very properly declared that the brute who ruptured his wife's eyes by kicking her in the face certainly deserved flogging as much as the criminal who attempted to garotte old gentlemen returning from their clubs. The latter possess political influence, which the unhappy women do not, and the Legislature stepped in to their aid, and supplemented the punishment of imprisonment by the administration of a flogging, with very beneficial results to all parties. It is surely time that the Legislature interfered in behalf of the unfortunate victims of brutal husbands. If wife-beating invariably carried husband-flogging with it, we should soon hear less of the former, and the police columns of our papers would not contain so many proofs, as they now do, that a man legally runs less risk in beating his wife to a jelly than in violently attempting to rob a stranger. Our contemporary, *Punch*, in his satirical cartoon of this week, has done excellent service in directing public attention to one of the disgraces of our boasted civilisation.

ONE SOURCE OF SKIN DISEASE.

A CORRESPONDENT of *Nature*, who signs himself "R. M.," states that he has satisfied himself that certain attacks of eczema of the face to which he was formerly liable were due to the use of impure soap for shaving purposes. He declares that the "prime old brown Windsor soap" of the perfumers' shops is chiefly manufactured from bone grease. This, as extracted from the bones by the action of boiling water under pressure, is of a dark tarry brown colour, and of an abominable odour. By various processes it is more or less defæcated, bleached, and deodorised, and is separated into two or three different qualities, the most inferior of which goes to the formation of railway or other machinery greases, whilst the better kind is saponified and highly perfumed. The natural brown colour of the grease gives it the right tint in the cheapest way without the colouring by caramel, which was the original method of manufacture. Some bars of brown Windsor contain a rich admixture of small, sharp angular fragments of bone, which, before boiling, were putrid. "R. M." states that, on three separate occasions, shaving with such soap, whilst he was otherwise in perfect health, induced an attack of eczema, which resisted medicinal treatment but disappeared on ceasing to use the soap.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE usual bi-monthly meeting of this Society was held on the 23rd inst., and the evening was exclusively devoted to the reading and discussion of an elaborate paper by Dr. C. Theodore Williams on the results of Warm Climate in the Treatment of Pulmonary Consumption. The remarks were founded on an analysis of 251 cases, and several sets of statistical tables were displayed in the room, and sent round for reference, containing analytical lists of moist and dry climates, the percentages of improvement or the reverse in various classes of cases, &c., the compilation of which must have involved a great deal of continuous care and labour. Dr. Wilson Fox criticised some of the conclusions drawn by the author. Dr. Leared, Mr. C. Brooke, and Dr. Heywood Smith, gave the Society some of their cosmopolitan experiences, and Dr. C. J. B. Williams, Dr. Hermann Weber, Dr. Sutro, and Dr. Dobell also took part in the discussion.

An invalid couch, designed by Dr. Dobell, and manufactured under the superintendence of Mr. Heather Bigg, was exhibited in the rooms during the evening.

MEDICAL SOCIETY OF LONDON.

THE old library of this Society had a narrow escape from destruction by fire on Wednesday last. About 9 o'clock on the morning of that day, the registrar, Mr. Poole, discovered flames proceeding from a cupboard where the gas-meter was placed. Happily the fire was quickly got under before it reached the great library; therefore the damage will be comparatively small. Had the fire extended, a total destruction of some of the most curious and valuable books known would have occurred. The Society have therefore to thank their trustees, who, before they accepted the office, made it a *sine qud non* that there should be a responsible officer in residential charge. We are glad to learn that the effects of the Society are insured, and that the fire will in no way interfere with the ordinary business.

VALUE OF MEDICAL EVIDENCE.

THE sudden death of Mr. Wyld, the editor and proprietor of the *Licensed Victuallers' Guardian*, and the charge made against his widow of having caused his death by throwing a gum-bottle at his head, furnish a striking example of the value of medical evidence in some cases of supposed criminality. The gentle attention referred to was clearly proved to have been paid to her late husband by Mrs. Wyld shortly before his death, but Dr. Mills, one of the divisional surgeons of the police, and Dr. Saunders, proved as clearly, by a post-mortem examination, that there was extensive fatty degeneration of the heart, and that death was due to natural causes, which would hardly even be accelerated in their operation by the gentle impact of a gum-bottle thrown by a lady's arm. If Mrs. Wyld should by-and-by find a consoler in her widowhood, she will, we may venture to hope, have learned to employ other methods of persuasion, and will not forget the peril in which she for a time stood, and from which she has only been delivered by medical science.

THE CROWN PRINCESS OF GERMANY.

THE accouchement of the Crown Princess of Germany took place shortly after ten o'clock on the 22nd inst., in the most favourable manner, and we hear from Berlin that Her Imperial and Royal Highness and child are progressing in every way most satisfactorily. The confinement was so quickly over that although Mr. Odo Russell and the German minister who officiates on such occasions were summoned at once, the special train was unable to bring them in time to Potsdam. A compliment is paid to the profession in England in the fact of Dr. Gream having been called to Potsdam for the fourth time on a similar errand; and we add with no little pleasure that he worthily sustains for us the dignity of the profession when in Germany.

SEA-WATER IN LONDON.

WHEN we ventured, some time since, to suggest in these columns the hygeian advantages that would accrue to the population of this great city if the Serpentine were filled with salt water, the idea, though ridiculed by some as too chimerical ever to be realised, was not deemed by us an impossibility by any means; and the correctness of our premises is borne out by the fact that there is now before Parliament an unopposed Bill, which has passed the second reading, for empowering a company to bring the sea-water direct from the ocean to London. The water is to be drawn from a pure source some quarter of a mile below low-water-mark, west of Brighton, and raised by a series of pumping-engines to the summit of the Dyke Hill, whence it will gravitate through enamelled pipes to London, there being intermediate reservoirs at Hand Cross and at Merstham. The engineer's calculations are for the delivery of half-a-million gallons every twenty-four hours; and the extremely moderate charge at which the sea-water will be supplied will bring its use within the reach of all classes of the community. By the medical profession especially the introduction of sea-water to the metropolis will be regarded as an invaluable acquisition.

THE NATIONAL ORTHOPÆDIC HOSPITAL.

THE supporters of another so-called hospital, which consists, we believe, of a house in Great Portland-street, and which is entitled the "National" Orthopædic, have been holding festival and making speeches at the London Tavern, under the presidency of the Marquis of Lorne. We should like to know whether royal and noble personages, before they engage in such undertakings, ever make any inquiry into the value of the institutions they are intended to support. We cannot too often repeat that the treatment of deformities is now a perfectly well understood and very simple branch of general surgery, practised and taught as such at every general hospital in London. That there should also be four special institutions for their relief is simply a misdirection of charity and a scandalous waste of money, without a single compensating advantage.

THE MASTER AND SERVANTS (WAGES) BILL.

IT is to be hoped that the select committee to which the consideration of this Bill has been referred will regard the fact that the Truck Commissioners, in their report issued in June last, while properly condemning the truck system, excepted provisions for medical and educational purposes, for contributions to friendly societies and savings banks. It would be a very responsible piece of legislation to withdraw the sanction of law from arrangements which secure efficiency, and which alone can ensure medical attendance on masses of men and their families, which are generally approved by working men themselves, by the medical profession, and by the Truck Commissioners. We believe very great misery would result. It would look more like good legislation to give a higher legal support to such provident arrangements, always on the understanding that the men themselves have a voice in the election of those who are to attend them.

TESTS FOR DETECTING STRYCHNIA.

THE *Popular Science Review* states that Dr. Filhol, in a recent paper on this subject, maintains that strychnia should, in cases of poisoning, be obtained in the solid state; the alkalinity of its solution should be ascertained, as well as its intensely bitter taste; its behaviour with chlorine, and its blue coloration under the influence of sulphuric acid and oxidising substances, should also be seen; while, lastly, as a very delicate reaction, Dr. Filhol observes that, with chloride of gold, strychnia (in solution) yields immediately a crystalline precipitate, which, although slowly, is yet distinctly formed in solutions containing one-tenth of a milligramme of the alkaloid. This precipitate and that formed by chlorine are at once dissolved by concentrated sulphuric acid, and, chromic acid being added, the well-known blue coloration that strychnia yields with this last reagent is produced. The presence of alcohol in liquids to be tested for strychnia should be avoided.

PATHOLOGICAL SOCIETY.

AT the next meeting of this Society on May 7th Dr. Burdon Sanderson, F.R.S., will bring forward for discussion the subject of Pyæmia; he will illustrate his views by specimens. The subject is one of considerable interest, and the more so as we understand that Dr. Sanderson has lately been directing his attention to this subject, and has been carrying on a series of experiments upon animals in his laboratories. We doubt not that we shall have some fresh light thrown upon the pathology of this disease.

BEER FOR THE AGED INMATES OF WORKHOUSES.

WE are no advocates of an extensive use of alcoholic stimulants in workhouses, but we have a very strong objection to depriving the aged inmates of their "glass of beer." Whilst wages remain as low as they are in agricultural districts, and there is no adequate machinery for saving up for old age, it must happen that a considerable number of poor but honest labourers end their days in the workhouse,

and it is a great shame to put them on what is often worse than penal diet. We therefore rejoice to find that our application to the guardians of the Chertsey union for an explanation as to why it was that the aged inmates had had their beer stopped, has attracted attention, and that the medical officer has been applied to for its restoration, this being the only way in which it can be legally allowed. The guardians were anxious for it to be known that it was not their wish that the beer should be stopped, but the order came from the Local Government Board.

THE EMPRESS EUGENIE.

WE regret to learn that the Empress Eugénie is labouring under an attack of acute inflammation of the parotid gland, not specific but due to cold. The affection is attended with severe constitutional disturbance, with great pain in the course of the facial and cranial nerves. This form of parotid inflammation is always a source of great anxiety to the physician, both from its tendency to involve important adjacent parts and from its occurring chiefly in a state of great depression of the strength. Baron Corvisart is in attendance upon the Empress, and Sir William Gull has been called in consultation.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

ON Monday evening the biennial festival in connexion with this excellent and promising institution was held at Willis's Rooms, the Right Rev. the Bishop of Manchester in the chair. There was a numerous assembly of ladies and gentlemen present. The sanitary arrangements of this hospital are of a very high order, and reflect great credit upon its originators and promoters. The patients are scattered through a series of houses in eight blocks, well sheltered from unfavourable winds. It is replete with domestic comforts, and each patient has a separate bedroom. It appeared from the report that the building is now rapidly approaching completion, when it will be able to receive 100 in-patients. During the past year 53 male and 36 female patients had been treated. After a very eloquent address from the Right Rev. Chairman, subscriptions and donations amounting to over £3000 were received during the evening. We prophesy for the Ventnor Hospital a long career of usefulness and honour.

THE PECULIAR PEOPLE.

SINCE the man Hurry, an elder of the sect known as the "Peculiar People," was committed for trial, another of his children has died from small-pox. At the inquest held last week on the elder daughter, Cecilia, the mother was in the room with the child during the proceedings, although the latter at the time was sickening for small-pox. Notwithstanding the warning the mother had received last week, she still refused to call in medical aid, but placed her faith in the "elders of the church." These latter, on being summoned, went through the idle form of laying their hands on the child's head and anointing it with oil. The child got rapidly worse, and died on Sunday morning. On Wednesday evening, an inquest was held, when the coroner strongly animadverted on the conduct of the mother, and, in adjourning the inquiry, observed that remonstrances and arguments were thrown away upon such people, who should be controlled by legal restrictions, and treated as madmen and madwomen. He ordered the elders to attend at the next inquiry, and threw out a significant hint as to their legal culpability. We commend the observations made by the coroner, who seems fully alive to the gravity of the question.

THE "NATIONAL HOSPITAL" AGAIN.

WE had occasion recently (February 10th) to notice, not in the most flattering terms, an institution dubbed by its promoters the "National Hospital," and we learn from the daily papers that the Annual Court of Governors of the charity has recently been held. In this report the ludicrous statement is repeated that the hospital is "for the special treatment of epilepsy, paralysis, nervousness, the primary stages of insanity, and all diseases arising from affections of the heart." Under these circumstances we cannot regret that the accounts showed £131 due to the treasurer, and that the annual subscriptions were put at the modest sum of £57. We are in a position to deny the truth of the statement that "the hospital is on the cottage principle," and we cannot but regret to find Mr. Brady, M.P., lending the sanction of his name to such an institution by taking the chair on the recent occasion.

A CASE OF IGNORANT CRUELTY.

FROM Oswaldtwistle, in Lancashire, we get a report of an inquiry before the local magistrates into the treatment of a boy of thirteen by his parents, resulting in the committal of the father for trial. It was found that the child, who is imbecile, had been confined to the house for the last seven years in a state of nudity, and the medical evidence went to show emaciation and neglect, but no actual cruelty.

We have nothing to say in behalf of the ignorant father of the child, but we are astonished to find that Mr. Nuttall, a chemist, and the landlord of the house, had been aware of the condition of the child during the whole period of seven years, and had frequently seen him crouched before the fire. Still more extraordinary is it that the facts were reported to the relieving officer five years ago, and yet nothing was done. The child is doubtless imbecile and mischievous, and, according to his parent's account, tears up his clothes. This may or may not be true, but we really think more blame is due to those who have not interfered earlier, than to an Irish labourer, to whom the sight of a naked child is probably not an unaccustomed one.

THE EXAMINATION OF PAUPER LUNATICS.

THE Poor-law Department have just issued the following instructions to the medical officer of the Lambeth Workhouse, and we think them important for the guidance of all who have to deal with pauper lunatics. The medical officer is—(1) to examine carefully the whole surface of the bodies of lunatic patients both on their admission to the workhouse and upon their departure from it, and to record the result of such examination; (2) to give written orders for the use of restraint whenever he deems it necessary; (3) to keep a record of the description and duration of the restraint used; (4) to keep the means of restraint under lock and key, retaining the key in his own custody.

WATERWORKS IN LIVERPOOL.

AT length the reports of Mr. Pole on the constant water-supply of Manchester and Norwich, long since noticed in this journal, have attracted the attention of the Liverpool Water Committee. Manchester is supplied on the constant system, and consumes 14 gallons per head per day for domestic, and 7 gallons for trade purposes; whilst Liverpool has a supply limited to ten hours daily, and the domestic supply is 21·5 gallons per head, and the trade supply 5·4 gallons. As a gallon per head per diem represents a rate of one halfpenny in the pound, it is probable that immediate attention will be given to the sources of waste.

CEREBRO-SPINAL MENINGITIS.

THE death of a woman was registered in Chelsea last week from the following cause as certified:—"Intense pain in lower part of spine; purpuric spots over the body; bleeding from the mouth; cerebro-spinal meningitis or purpuric fever about thirty hours."

From the weekly returns which are supplied officially to the Registrar-General by Dr. Russell, the chief medical statist of New York, it appears that between the 13th of January and the 17th of March there were 31 deaths registered in that city from cerebro-spinal meningitis, and that there were respectively 12 and 18 fatal cases in the two succeeding weeks.

THE POOR PIGEON.

THE newspapers that devote a considerable portion of their columns to what is called "sport," are again beginning to be filled with the details of pigeon slaughter; and it seems probable that this disgraceful pastime will, this year as last, be the chief delight of a few empty-headed fashionables, and of the counter-jumpers who imitate them. When the late Mrs. Manning was hanged in a black satin gown, that material ceased to be in request for the apparel of ladies. We wonder very much whether, if the "claimant" should chance to be convicted on the charges now pending against him, his favourite amusement will at all decline in popularity?

THE PUBLIC HEALTH BILL.

THERE is very little hope of any immediate progress for the Public Health Bill. The Government are of opinion that it is not desirable to go into committee upon it until the Ballot, Scotch Education, and some other important measures have been disposed of, nor until some degree of continuous attention can be given to the amendments to be proposed.

MR. MUNDELLA'S Bill for the further restriction of the hours of labour of children, young persons, and females in any factories that are within the scope of the Factories Acts, enacts that no child, &c., shall be employed for any purpose after one o'clock on Saturday, and not for more than nine hours and a half on any day, nor for more than fifty-four hours per week (except in recovering lost time).

WE are glad to hear that the Society for the Relief of Widows and Orphans of Medical Men has granted an annuity of £50 per annum to the widow of the late Dr. Steggall—a piece of information that Mrs. Steggall withheld from us in the first instance. The same Society has received notice of two legacies, one of £200 from Mrs. Ann Hammond, and the other of £500 from Mrs. Jane Lyon.

THE Quarantine Board of the colony of British Guiana have lately amended their rules, and have issued very stringent orders as to the fumigation of mails landed from steamers that have had on board any infectious or contagious disease. The regulations also indicate a quarantine of forty days in the case of any vessel arriving from a place infected with small-pox.

THE Gower board of guardians, Glamorganshire, have agreed to double the salary of Mr. Ellis, one of their district medical officers. Not too soon, we opine; for Mr. Ellis had the charge of a district of 48,651 acres, with a population of 4641 persons, at a salary of £35 a year!

THERE are 15 medical men among the deputies in the Italian Chamber and 187 lawyers!

THE Indian troop-ship *Malabar* arrived at Spithead on Wednesday morning from Bombay, *viâ* the Suez Canal, with several cases of measles and small-pox on board, and has been ordered by telegram from the Admiralty to remain at anchor until further orders, and to hold no communication with the shore except by signal.

MR. PALMER, Surveyor to the Rugby Local Board of Health, has published a letter in *The Times* contradicting Dr. Letheby's assertion of the offensive condition of the sewage farms in operation throughout the country, and stating that, as far as Rugby is concerned, his description is purely imaginary.

THE "Erratics" will give one of their excellent performances on Wednesday evening, May 1st, at St. George's Hall, Langham-place, in aid of the Royal Hospital for Diseases of the Chest, City-road.

DR. PROSSER JAMES has been authorised by the President of the Medical Congress at Lyons to receive the names of English medical men desirous of supporting the Congress by becoming *membres adhérents*. This entails no pecuniary contribution.

THE *Melbourne Argus* expresses dissatisfaction with the composition of a commission for inquiring into the causes of diphtheria, which has long been a fatal scourge in the colony. It is a great misuse of authority and public money to assign such duties to any but competent men.

WE are informed that the annual dinner of the Medical Officers of the Army, Navy, and Indian Services will be held this year on the 30th of May, at the Freemasons' Tavern, Sir J. Ranald Martin, C.B., in the chair.

GENERAL BOURCHIER is suffering from an attack of dysentery, induced by the hardships of the late Looshai campaign.

THE British Medical Association has just published a balance-sheet, which shows a deficit of £314 17s. 10d.

Public Health.

DUTIES OF MEDICAL OFFICERS OF HEALTH.

No. V.—HOUSE-DRAINAGE.

PERFECT house-drainage implies a dry and wholesome foundation and the means of discharging liquid refuse into the sewers without danger. To the first sufficient attention has not been paid by public authorities. There is scarcely a large town in the kingdom where houses have not been erected on ill-drained ground without any precautions being taken to prevent the rising of damp. The walls, for example, are raised upon the surface of an undrained field, and the floor-boards are laid upon the ground without any space underneath or openings for ventilation. In many cases hollows have been filled in with ashpit refuse, and when such deposits have been considerable, there is a continuous exhalation of foul gases, which gives rise to diarrhœa and fever. The town authorities of Liverpool have now fully recognised the impropriety of building houses on such impure foundations, and they have suggested that a clause forbidding the practice should be inserted in the Public Health Bill. But if the Bill should enable local authorities to make efficient bye-laws, it will simply be necessary to enact that no new structures and no re-erections should be made until the site has been inspected by the officer of health and surveyor, and a certifi-

cate given that it is dry and wholesome. When this is not the case, the only protection is a layer of concrete made with Portland cement. Particular attention is required to the condition of the foundation in the older parts of towns, particularly where cesspools have been in use for many years; and in older houses it is desirable that a thorough search should be made for large old-fashioned brick drains. They are to be found beneath the floors; they are square in form, and made of porous brick. Originally intended for the conveyance of slops only, they have often waterclosets connected with them, and as there is little or no current, accumulations of excremental refuse will be continually giving off the foulest gases. As such drains are never water-tight, the whole surrounding subsoil will be found in a polluted state. There is a still worse form of drain, called the rubble-drain, a source of great danger. A trench has been dug in the subsoil, and the space having been filled with large stones, the whole is covered in with turf. In many cases this form of drain was not provided with any outlet whatever. In London, shallow dumb-wells or drains may frequently be found in areas and back-yards, and if foul water have been by any chance turned into them under the supposition that they are connected with the sewer, a nuisance will soon be created, to be discovered only when repeated attacks of fever have occurred. Wherever building operations are being extensively carried on, it will be quite necessary to watch for this source of evil, for it is by no means rare to find all the house-drains with the semblance of perfection, and yet with no proper outlet into the sewer. In some districts of London—and the same is doubtless the case in other towns—the floors will be found below the outside level, the boards will be rotten and uneven, and the ground underneath riddled by rats. Under such conditions enteric fever becomes endemic. In the country it is necessary to examine carefully where the drainage leads to, particularly when the water-supply is derived from a neighbouring well. In the chalk and lime-stone, which form excellent sites for dwelling-houses, it often happens that the water-supply is derived from a fissure in the rock, and that the cesspool empties itself into the same fissure at another point. The remedy in all these cases is to break up the entire basement, cleanse away all removable filth, fill up the cesspits and dumb-wells with concrete, removing the rotten sewers whenever practicable, and lay in stoneware pipes instead, bearing in mind that the shorter the course of all drains under dwelling-houses, the safer they are. When houses are erected on clay and marl and on the sides of hills, it will be necessary to look out for water rising upwards through small independent channels. This evil can only be remedied by thorough deep drainage.

SMALL-POX AND FEVER IN LONDON.

The reports of the metropolitan Fever and Small-pox Hospitals indicate that London was rarely freer from fever, and that small-pox is declining slightly. It is sad to find that unvaccinated children continue to be admitted to these establishments.

The presentation of the quarterly accounts, particularly of the Fever Hospital, begins to show the costliness of large hospitals when not kept full. The daily cost of the patients has risen at Stockwell from 2*s.* 0½*d.* to 4*s.* 4*d.*, at Hampstead from 1*s.* 10*d.* to 2*s.* 7½*d.*, and at the Homerton Fever Hospital, where there are at the present moment as many servants as patients, the total cost is 5*s.* 9½*d.* each per day, or upwards of £2 per week. This is a state of things against which we gave ample warning, and it should induce the managers to pause before they proceed to any further erections on the sites they have recently purchased.

LOCAL GOVERNMENT INSPECTORS' REPORTS.

Radford.—Dr. Thorne Thorne has paid a second visit to Radford, near Nottingham, where there has been a second epidemic of enteric fever. In a population of 11,574 there were no less than 45 deaths in the last quarter of 1871, and 9 deaths in January, 1872. At least 300 persons have been attacked. Scarcely any of the recommendations made at the first visit have been carried out. The sewers are a source of danger: they are neither properly flushed nor adequately ventilated, and it is to the latter defect that the fever is chiefly due. The fever has prevailed mostly at the higher parts of the town, and the sewer gases obtain easy access to the houses through the drains connected with the kitchen sinks. Of this cause of fever Dr. Thorne's report affords most conclusive evidence. The excrement nuisance has been lessened, but not removed. There is no sufficient authority, and whole streets are without proper closet accommodation. Finally, there is no medical officer of health. Small-pox is now prevailing, and the neglect of vaccination is very culpable.

Warrington.—Dr. Ballard has made an interesting report on the sanitary state of Warrington, where typhus has been epidemic for a year, and where enteric fever is gradually becoming more prevalent. The most remarkable feature in the town is the arrangement of back-to-back houses in ill-ventilated courts. The overcrowding is terrific. Many of the houses are unfit for human habitation, and there is no ventilation whatever. There is a deficient water-supply, and the sewers cannot be properly flushed. The water itself is not of good quality, and has given rise to enteric fever in several well-marked cases. As a result of the inspector's visit, a medical officer of health will be appointed. Dr. Ballard recommends the abolishing of middens, the ventilation of the houses, and the application of Mr. Torrens's Act to dwellings unfit for habitation, the establishment of a hospital and ambulance, and an improved water-supply.

Olney.—This village affords a good illustration of the utter want of sanitary administration. During the prevalence of infectious diseases no means had been taken to prevent their spreading; indeed, the only action of this sort has been the distribution of chloride of lime in two instances. The vestry made an inspection, but nothing came of it.

ADULTERATION IN LIVERPOOL.

The Liverpool health authorities have taken steps to check adulteration. Any person may take articles of food and drink to the public analyst and have them analysed. A confidential report will be sent as to the purity of the substance, and if anything is found injurious to the public health, a detective will be sent to purchase a further sample, and, if necessary, the matter will be brought before the justices in court. Anonymous complaints will not be noticed, and no certificates will be given which can be used for trade purposes. The whole country is greatly indebted to Liverpool for setting this very useful example.

NAVAL SICK MESSES.

BY a recent Admiralty circular the surgeons of Her Majesty's ships are relieved from a good deal of troublesome account-keeping in connexion with the necessary arrangements of the "sick bay," the efficiency of which is, however, at the same time increased.

The Lords of the Admiralty have decided that the Sick Mess Fund is to cease to exist, and that all necessary expenses on account of the sick afloat are to be defrayed and accounted for in the same manner as other necessary expenses of Her Majesty's ships. After the 1st of the present month such necessary disbursements for the sick as are now authorised by the Queen's Regulations to be made by the surgeon out of the Sick Mess Fund, are to be defrayed by the paymaster, on the requisition of the surgeon, approved by the captain, and to be accounted for by him in his cash account. And in order to avoid the necessity for formal requisitions and vouchers for every petty disbursement, and to afford the medical officers equal facilities to those now existing for procuring the ordinary articles of extra fresh diet, &c., and for paying for washing and other small, frequent, and necessary expenses for the sick, the paymaster of each ship in commission is to advance to the surgeon such an amount as the latter may consider necessary and the captain may approve. As in future the naval votes will provide for such articles of extra fresh diet and other small expenses for the sick as are now defrayed out of the savings &c. paid to the Sick Mess Fund, the savings of men who are victualled in the sick bay are not to be paid, but, together with punishment stoppages, are to lapse to the Crown as provisions unissued, and to be debited on the paymaster's victualling account. Until arrangements can be made for the supply of sick bay furniture and stores, on

an established scale, from medical depôts to ships on being commissioned, the surgeon is to make immediate application, through his commanding officer, to the Director-General of the Medical Department for such other articles as he may consider to be necessary for the use of the sick bay; and on receiving the Director-General's sanction to the demand, he is to procure the articles allowed on the lowest possible terms, and to take them on charge on his accounts. The expense of such articles is to be defrayed by the paymaster.

These changes will, we believe, be welcomed by the members of the naval medical profession, and will tend to increase the comfort and well-being of the patients under their care.

THE BAKER BROWN FUND.

A FUND is being raised on behalf of Mr. Isaac Baker Brown, who is completely prostrated by paralysis. He is also in great pecuniary distress. The following additional subscriptions have been received.

	£	s.	d.
Amount previously advertised ...	197	15	0
An old Patient in Cheshire	20	0	0
Col. Tomkinson, Willington, Cheshire	10	0	0
Rev. J. Hill, Wiverton, Cheshire ...	6	0	0
E. P.	5	0	0
Dr. Waters, Chester, per Mr. J. Harrison, Chester	2	2	0
Messrs. Maw, Son, and Thompson ...	2	2	0
Mr. Ed. S. Haviland	1	1	0
Mr. Thomas Ballard	1	1	0
Dr. E. S. Willett ...	2	2	0
Mr. J. T. Propert ...	1	1	0
Mr. George Gregson	1	1	0
Dr. Walter Bryant .	1	1	0
A. B. W.	1	1	0
Dr. Norton	1	1	0
Dr. Algernon Norton	1	1	0
Dr. John Waggett .	1	1	0
I. S. T.	0	10	0
Dr. Fox Grosvenor .	1	1	0
Dr. Edmund Nash .	1	1	0
Mr. John Morgan ...	1	1	0
Mr. Edwin Humby .	1	1	0
Dr. Drury Lavin, Bushey	1	1	0
Dr. Neale, Bury St. Edmunds	2	2	0
Mr. Parker Young .	2	2	0
Mr. Tomes	1	1	0
Mr. J. S. Turner ...	1	1	0
Dr. Edward Smith .	1	0	0
Dr. Protheroe Smith	2	2	0
Mr. J. T. Musgrave	2	0	0
Two Friends, per do.	2	0	0
Dr. W. H. Day ...	1	1	0
Dr. Peter Allen ...	2	0	0
Dr. Walker, Peterborough	1	1	0
Mr. George Vaughan	5	0	0
A Friend	1	0	0
Mr. Benjamin Millar, Denmark-hill ...	1	1	0
Dr. Richard Neale, St. John's Wood .	2	2	0
Mr. Myers, Coldstream Guards ...	1	1	0
Dr. Tyacke, Chichester	1	1	0
Mr. Alfred Leggatt	1	1	0
Dr. Randall	1	1	0
Dr. Shettle, Reading	1	1	0
Dr. Moxey, Turnham-green	1	1	0
Mr. Jas. M. Appleton	1	1	0
Mr. C. J. Bleeck, Warminster	1	1	0
Rev. W. H. L. Cogswell	1	1	0
Dr. G. O. Spencer...	1	1	0
Mr. Thomas Norris, Chelsea	1	0	0
Mr. W. I. Square, Plymouth	1	0	0
Mr. Alfred Rooker, per ditto	1	0	0
Mr. Joseph Kisch...	1	1	0
Mr. Campbell Davies, Sandbach	2	2	0
Dr. Morell Mackenzie	2	2	0

The treasurers are Dr. Forbes Winslow, 23, Cavendish-square, and Dr. Charles Cogswell, 47, York-terrace, Regent's-park, to whom subscriptions may be sent.

CAMBRIDGE UNIVERSITY.

PROFESSOR HUMPHRY'S annual report to the Senate of the University of Cambridge respecting the School of Anatomy states that immediately after the passing of the "Anatomy Act Amendment" Bill of last summer, alterations were carried out in the dissecting-room and in the space beneath, for the purpose of taking advantage of the provisions of the Act. The result has been, that a far greater amount of work has been done in the dissecting-room this season than in any preceding year.

Dr. S. Wilson, a graduate of the University of Edinburgh, and formerly a demonstrator in that University, has succeeded Mr. Carver, who resigned the office, as demonstrator of anatomy. Dr. Wilson devotes his whole time to the teaching and superintending the students and the other duties of the office.

In consequence of the extended teaching and the increased opportunities for practical anatomy, the full recognition of the school of anatomy by the Royal College of Surgeons of England has been obtained; so that a student may now complete the required courses of anatomy and physiology in Cambridge.

A large number of beautifully-dissected, well-displayed, and highly-instructive specimens have been added to the Museum of Zoology and Comparative Anatomy. A valuable series of dissections, illustrative of the comparative anatomy of invertebrates, has been prepared and placed in the museum, with a printed descriptive catalogue for the use of the students, constituting a very important addition, which is well appreciated. In the physiological series the specimens have in part been rearranged, some have been remounted, and some, not being of much value, have been rejected. Some new skeletons have been articulated and added, and some of the old skeletons have been repaired and articulated in an improved manner.

The work done during the past year has been very satisfactory, especially the great improvements introduced in the physiological series.

Correspondence.

"Audi alteram partem."

THE ROYAL ORTHOPÆDIC HOSPITAL.

To the Editor of THE LANCET.

SIR,—"Oh, that mine enemy would write a book!" I believe to be a true saying. Were I in reality Mr. Brodhurst's enemy, I might well exclaim, "Thank goodness he has published a letter!" As he mentions me by name I must make no apology for requesting you to insert my reply.

Mr. Brodhurst's first statement is inaccurate. I never was in a small minority on the Committee of Management. I resigned the chairmanship for a reason quite unconnected with the case of the surgeons, and a deputation, headed by a relative of Mr. Brodhurst's, requested me to reconsider my determination.

To Mr. Brodhurst's second statement a stronger word should be applied. He says that prior to most of the Courts of the Royal Orthopædic Hospital, an active canvass for new governors has taken place. I have inspected the last subscription-book of the hospital, from its commencement in September, 1859, a period of nearly thirteen years, and I do not find the slightest indication of any active canvass, or of any canvass whatever; the largest number of male governors at £1 1s., entitled to vote, has never exceeded six during the month previous to the date at which the Annual Court has been held, the average being from three to four.

Mr. Brodhurst's next statement is that at the Special Court his friends made votes for him. This I have no doubt is true; but the question turns on his having manufactured votes at the Annual Court, and not at the Special Court. It was at the Annual Court that the condemnation was passed on his senior officers, and it was at that court that every vote was made by Mr. Brodhurst or with his knowledge, amounting in number to thirty-two, at which packed meeting the censure on the two senior surgeons was carried; and I ask Mr. Brodhurst to deny if he can that he voted himself for that censure, and by the action of his feet betrayed a most demonstrative satisfaction when the result of the vote was announced from the chair.

Mr. Brodhurst then accuses me of having borne him ill-will for a long time past. Mr. Brodhurst is in error. I have but the slightest personal acquaintance with him. As to his professional capacity, my opinion was of necessity, to a certain extent, based upon the reports of both his senior surgeons. I had, however, come to the conclusion that it would be better to make Mr. Brodhurst full surgeon, and give him an independent position, when we should soon have ascertained how far he was able to give satisfaction to

his patients. At a meeting held at Mr. Tamplin's house before the Annual Court, my view was unanimously adopted, and by none more cordially than by Messrs. Tamplin and Adams themselves.

Mr. Brodhurst admits having obtained votes through his friends for the Special Court. I find by the hospital books that 81 annual subscribers at £1 1s. each, entitled to vote, were made for the Special Court. Admitting that only half were made by Mr. Brodhurst's friends, if to 40 we add the 32 made by Mr. Brodhurst himself at the Annual Court, and we except the committee and three ladies, who held up their small fair hands against the cause of conciliation, we shall find that there were no more independent votes given against the senior surgeons at the Special than at the Annual Court, the number being 99 to 98.

Special hospitals are apt to degenerate when the guiding genius that inaugurates them is withdrawn, and this is a fate not unlikely to attend the Royal Orthopædic Hospital. Whether it will die under the blighting influence of a public inquiry, or whether it will continue its useful mission, will depend upon the course now taken by the committee.

I am, Sir, your obedient servant,

ABINGER.

Inverlochy Castle, Kingussie, April 22nd, 1872.

To the Editor of THE LANCET.

SIR,—In Mr. Brodhurst's letter, published in your journal on the 13th of April, it is stated that "prior to most of the Annual and Special Courts an active canvass for new governors has taken place." Now, Sir, I beg to state that I have been connected with the Royal Orthopædic Hospital from its foundation, thirty-four years since, and I am not aware that such a practice has ever been followed. It is to be regretted that Mr. Brodhurst himself voted on the occasion of the Annual Court in favour of the report of the Committee, containing a censure upon Mr. Adams and myself, and which compelled us to tender our resignations.

I am, Sir, yours, &c.,

Old Burlington-street, W., April 23rd, 1872. R. W. TAMPLIN.

*** We published last week a letter from Mr. Adams, in which he said that he should shortly "ask for an authoritative judgment" upon the recent events at the Royal Orthopædic Hospital. Surely the pledge thus given is one that should be redeemed without delay, so that this most painful and discreditable controversy may be finally set at rest.—ED. L.

CHILDBIRTH AFTER INTERMENT.

To the Editor of THE LANCET.

SIR,—In THE LANCET of April 13th you have raised the following interesting question, "Can a woman be delivered of a child after she is buried?" In answer to it I beg to forward the six following cases of delivery after death without the aid of art.

Rudolph Camerarius* tells us of a Spanish inquisitor who caused a pregnant woman to be hanged. Four hours after the death of the unhappy mother, while still hanging on the gibbet, two living children fell from her womb. This occurred in 1551.

Thomas Bartholin† relates a case in which the child came into the world nearly two days after the death of the mother, three midwives having exhausted their art in attempting to deliver her.

Cornius‡ writes of a woman of Madrid, of the illustrious family of Lasso, who having been reputed dead, was placed in the family tomb, which being opened some months after they found the corpse holding a dead infant on its right arm.

G. A. Reiss§ says the wife of François Arevallos de Suesso fell ill in that town towards the last months of her pregnancy. Being dead a few days, or having been reputed so, she was buried. The husband, who had been diligently sought for in a distant place where he had gone on business, arrived towards the middle of the night; learning that his wife, whom he loved much, was buried, he wished the satisfaction of seeing her once more. He went to the church and caused her to be exhumed. Scarcely had they opened the coffin when they heard the cries of a child. Everyone was seized with astonishment; they called the justice, the priests, and many others, and when the shroud was lifted they saw the head of the child, which was endeavouring to extricate the rest of its body. It was taken away alive, and lived long after under the name of "Fils de la terre."

Dr. Harvey* asserts the following:—"A certain woman here amongst us (I speak it knowingly) was (being dead over night) left alone in her chamber; but the next morning an infant was there found between her legs, which had by his own force wrought his release. Gregorius Nymmanus† hath collected certain examples of this nature out of approved authors."

Percivall Willughby‡ gives us one of the most authentic and best recorded cases of childbirth after interment. "There was a strange yet true accident which happened at Ashburn, in Darbyshire. At the first hearing of it, and for that I would be more certainly informed of the truth, I sent unto my friend Mr. Abraham Mercer, lecturer of ye place, desiring him to let me have a true relation of it, and from him I received this certificat, December the 9th, 1667.

"'Emme, the wife of Thomas Toplace, was five dayes in labour. The sixth day shee had a medicine given her to ease her paines by a Doctor of Divinity (Dr. Kettleby) pretending some small skill in physick. After the taking of the medicine in the evening shee was supposed to bee dead, and after nine o'clock that night shee was buried. As shee was carried to the grave, some thought that they heard a rumbling in the coffin. A noise was heard like the breaking of a bladder, after which followed a noisome smell. Shee had an ill-conditioned man to her husband, that frequently gave her evil words, and oft blows with them. Her husband, with his mother and the midwife, with some other women, made haste to bury her, having, among other things, filled her mouth with hurds (tow). Several women were much troubled at her hasty burial, and thought that shee was not dead. Among this company there was one, Anne Chadwick by name, that returned to the grave, and laying her ear to the ground, shee heard a sighing, as it might be of one dying in that grave. A souldier being with her heard the same, and he affirmed, besides the sighing, that hee heard the crying of a child. They went to Mr. Legg, a justice of the peace in that town, and told him of it, as also the minister and others, what noise was heard in the grave, and Anne Chadwick said that shee beleeved that the woman was alive. The earth was cast off from the coffin, and the coffin was found somewhat opened, where formerly the bords were joined together, with a ridg at the top, and the coffin was hot. After that it was opened, the womans hand was seen bare, and some saw hurds lying on her breast, and in her hand, with which her mouth had been stopt by her husband's friends. And it was beleeved that the buried woman had pulled those hurds out of her mouth with her own hand after that shee was interred. Another woman put down her hand and found a child delivered in the coffin, and descended as low as her knees, or lower, with one hand in the mouth and the other extended by the side; and the after-burden was also come from her. Her husband, with his mother and the midwife, with others which laid her forth (after her supposed death) were much displeased that the grave was opened, and at the murmuring of the people, hee gave threatening words against some of the company; but at last hee thought that it was his best way to bee quiet and to let all their words and deeds sleep with his deceased wife. I shall leave her husband, and his mother, and the women that would have her so suddenly buried to be censured as each particular person pleaseth.'

"Whether this woman was alive or dead when she was buried? Elizabeth Shent, with her mother, Anne Chadwick, with others, affirm these passages to be true, and the coffin was left open all that night that the bodies of the mother and the child might bee seen by all those that would look on her. Mr. Abraham Mercer, also, took a cer-

* Silloge Memorabilium Medecin.
† Act. Hafn., anno 1679.
‡ Anecdotes &c. dans les Accouchmens. Sue.
§ Elysius Corpus jucundarum quæstionum.

* Anatomical Exercitations, 1653, p. 402.
† "Dissertatio de Vita Fœtus in Utero," 1628. See also J. G. Müller, "De Partu Post Mortem Matris," 1714.
‡ MS. copy of Country Midwife's Opusculum, in the possession of the writer.

tificat out of the Parish Register book, where it was thus recorded:—*April ye 20, 1650, was buried Emme, the wife of Thomas Toplace, who was found delivered of a child after shee had lain two hours in the grave.*"

Sue* informs us that it is the custom of certain ignorant women, who enshroud those dying pregnant, to shut up in the coffin with the corpse a needle, scissors, and thread, which, he says, is a proof that experience has convinced them that women can be delivered after death.

Believe me, Sir, yours, &c.,

Upper Wimpole-street, April, 1872. J. H. AVELING, M.D.

CAUSATION OF ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—The interest as to the causes of the illness of his Royal Highness the Prince of Wales having not as yet quite died out, I think that a statement of the following facts may perhaps prove acceptable to the readers of your journal.

A short time since, when passing along the principal street of the town of Tiverton, my attention was attracted by some men working at a drain which they had opened across the road, and on looking into it, I saw a large collection of dark-coloured fluid possessing all the well-known characteristics of highly concentrated sewage. On inquiry, I found that the drain, having become obstructed, had burst, and that an overflow of sewage had taken place into the well supplying the house with water, the bad taste and odour of which had first directed attention to the defective condition of the drainage.

A few days afterwards, I was much surprised at being requested by Mr. Reed, of Tiverton, to visit with him in consultation no less than three well-marked cases of typhoid fever in the house from which the drain alluded to proceeded, and also to learn from him that a fourth case of the same disease had just been removed to his home at a distance, in the person of a young man employed on the premises. Mr. Reed moreover informed me that in the house immediately opposite, and connected with the same drain, two cases of typhoid fever had also occurred, upon which he was also in attendance; and I have since ascertained that the occupants of that house, finding the water of the well from which they were usually supplied disagreeable both as to taste and smell, had applied for water to the house opposite, and had made use of the water from the well also contaminated by an overflow of sewage. From a defect in one drain we have thus no less than six well-marked cases of typhoid fever, to which no other cause can be assigned. They all progressed favourably and terminated in recovery without any serious intestinal complication, the period of incubation having been about twelve days.

The narration of their occurrence may, I think, prove interesting, as showing that typhoid fever may without doubt be occasioned simply by an overflow of sewage into water used for drinking purposes, and without any admixture of the excreta of individuals already affected with that disease, no other cases having previously occurred in the immediate vicinity.

I remain, Sir, your most obedient servant,

HENRY DOWNES, M.D.,
Deputy Inspector-General of Hospitals.

Tiverton, Devon, April 6th, 1872.

THE HANWELL ASYLUM.

To the Editor of THE LANCET.

SIR,—In reference to a letter on this subject, which appeared in your last number, signed "M.D. Cantab.," allow me to state that I am not the assistant medical officer alluded to, nor am I a candidate for the resident medical officer's appointment, vacant by the retirement of Dr. Begley. Whoever may aspire to Dr. Conolly's mantle, I only hope he may find it.

I am, Sir, your obedient servant,

Middlesex Lunatic Asylum, Hanwell, W., April 20th, 1872. J. HAWKES.

P.S.—My reason for making the above statement is that many of my professional friends and others are apparently under the impression that I am seeking the post.

* *Op. cit.*

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—Looking at the undecided answer of Mr. Cardwell to Sir E. Lacon, it is rather puzzling to determine what steps to take in the matter. Are the surgeons expected to take the initiative, and send in their claims at once, or wait until the new scheme is matured? Time is of vital importance to those who, like myself, will have to seek for an opening for practice, and we cannot under such circumstances know our fate too soon. If we cannot get something more positive from the Secretary for War, I would suggest that two meetings be organised, one in London for the southern, and the other in Birmingham for the northern counties, to take steps for drawing up a memorial, and appointing a deputation accompanied by our M.P.s to wait upon Mr. Cardwell and fully represent our case.

I am, Sir, your obedient servant,

April, 1872. MILITIA.

GLASGOW.

(FROM OUR OWN CORRESPONDENT.)

IT appears that something of the nature of a *coup d'état* is being attempted in regard to our sanitary affairs. A committee of the Police Board has submitted a report recommending the dismissal of the whole medical sanitary staff, and the appointment of one medical officer who would devote his entire time to the duties of the department. Rumour has it that the proposed alteration has been instigated in the interest of one of the present subordinates, who, it is averred, will most probably receive the appointment. It must strike everyone that, if a reorganisation of the department be needed, it might have been carried out with a little more consideration for the feelings of the present medical officer. A reform begun by ignoring his existence is initiated under too questionable auspices to enable us to augur much good from it. Dr. Gairdner has never displayed tenacity of place; he is, besides, a gentleman of acknowledged attainments in sanitary science, and has admittedly discharged his duties with efficiency. He has published a very pointed and dignified remonstrance. That his official connexion with the sanitary office, however well-qualified he may be for the duties, is somewhat derogatory to his status as Professor of Medicine in the University, and consequently prejudicial to his professional and social position, is, I believe, the general opinion of the profession in Glasgow. Should he lose the appointment, he will not thereby lose in the estimation of his professional brethren.

The buildings of the new University Hospital are making very slow progress, on account of want of funds. The University authorities have displayed an inexplicable want of energy in the matter. The citizens of Glasgow have ever responded promptly to an appeal for such an object as increased hospital accommodation, provided the appeal were properly made. The governing body of the University must have a large amount of patience if they are content to see the subscriptions come in, as at present, in driblets. They cannot but see that the great distance between the places of systematic and clinical tuition is not only productive of much inconvenience to the students, but is most prejudicial to the medical school.

The alterations in the medical organisation of the Infirmary, made some years ago, have now had so far a fair trial. The throwing open the privilege of giving clinical lectures to all the physicians and surgeons has, I understand, been attended with excellent results. Whether the regulation respecting continuity of tenure of office will have equally beneficial effects remains yet to be seen.

23rd April, 1872.

NEWCASTLE-ON-TYNE.

(FROM OUR OWN CORRESPONDENT.)

THE Annual Report of our Infirmary mentions that, owing in part to the improved cooking apparatus, the very great consumption of stimulants had been considerably diminished. In the former year £459 0s. 6d. was spent in

beer, wine, and spirits, but in the year just completed £369 11s. 11d. had sufficed for these articles. There had been a small increase in the number of in-patients admitted to the benefits of the Infirmary during the year; the number being 1693, against 1615 in the former year. The out-patients in the past year had amounted to 2334.

The Hospital Sunday collection, though practically £154 less than it was last year, was still considerable; whilst the amount derived from the fancy ball, a scheme suggested by Dr. Page, was much more.

An inquest has been held at the Sunderland Infirmary this week on the body of a boy aged eleven years, who died at the institution after manifesting symptoms of hydrophobia. It appeared from the evidence that the boy was taken ill on Friday last, but it was not ascertained until Monday evening that he was suffering from the disease; he was removed to the infirmary on the afternoon of that day, where the disease continued to develop, finally causing the boy's death on Tuesday morning. The boy had been bitten by a pup some months ago, and the dog was afterwards destroyed.

A meeting has recently been held here to promote a memorial of the late Mr. W. A. I'Anson, who was well known and respected here as a citizen and as a successful general practitioner; while in the long course of a very active career he was honourably distinguished by his kindness to his poorer patients, and in periods of epidemics few in our town worked harder.

Newcastle-on-Tyne, April 20th, 1872.

Obituary.

ROBERT HALDANE PATERSON

(OF BRIGG, LINCOLNSHIRE).

THE town and neighbourhood have just suffered a severe loss by the sudden death of their oldest medical practitioner. Robert Haldane Paterson was born in Edinburgh, and became a licentiate of the College of Surgeons there in 1823, and afterwards, serving an apprenticeship in England with the late Mr. Watson of Cottingham, obtained the licence of the Society of Apothecaries, London, in 1834. He commenced practice in Brigg thirty-eight years ago, and soon obtained, by his zeal, skill, and attention, the confidence and affection of his patients. He suffered during the last few years of his life from a gouty affection of the head; and, feeling unusually unwell, went a week or two ago to Buxton for the benefit of his health. There the alarming symptoms increased, and he never returned to resume the work which was the study of his life.

In 1868 a testimonial of nearly £200 in value was presented to him by "his patients and friends, in recognition of his valued services in his profession." His memory will long linger in the hearts of his many friends, and of his widow and seven children, who have sustained so irreparable a loss.

HENRY TOFTS, M.D., M.R.C.S., L.S.A.

WITH great regret we have to announce the death of Dr. Henry Tofts, which sad event took place at Woking, on the 6th inst. He had been in a very precarious state of health for some time past, but was able to discharge his duties up to within two days of his death. His kindness and urbanity of manner were proverbial, and though his practice was general, the poorer portion of the community came more particularly under his attention, and to them he proved a true and considerate friend, and by whom his loss cannot but be sincerely felt. The deceased was of a quiet and unpretending disposition, rarely interfering with matters foreign to his profession, although with abilities that would have taken him to the front, either in questions scientific, parochial, or political. He seemed to hold to the opinion that the time and service of a medical man should be given to his patients and calling, and his duties accordingly were performed in a conscientious and uninterrupted manner.

THE heat in Calcutta during the past month is said to have been intense, being several degrees higher than in the corresponding period of previous years.

ROYAL COLLEGE OF PHYSICIANS.

A REPORT of a special Committee, which was appointed by the Royal College of Physicians to watch the progress of Sanitary Legislation in Parliament this session, was laid before the College at its meeting on Thursday last.

The Committee, having fully considered the provisions of the Public Health Bill, were of opinion that the question of areas and boundaries is one which has important bearings on the standing and qualification of the officers entrusted with their supervision, and is consequently of great importance with reference to financial arrangements and administrative efficiency; but they did not recommend the College, as a purely medical corporation, to do more than allude to the subject in addressing Her Majesty's Government upon this Bill. They were unanimous in recommending the College to adopt and urge upon the President of the Local Government Board, amongst other things—

That the district Poor-law medical officers should, as far as possible, be in every case appointed assistant medical officers of health, and receive such additional remuneration as may be approved by the Local Government Board.

That for each large town there should be one chief medical officer of health, who ought not to be engaged in private practice.

That the Poor-law medical officers, as health officers, should be in direct relation to some superior medical officer of health, or district inspector, who might support the local officer in the discharge of his duties, and would be himself the responsible adviser of the sanitary authorities.

That the medical officers of health should, in the discharge of their proper sanitary functions, be under the direction and control of medical and not lay inspectors.

That two or more medical men of eminence should be associated with the medical officer to the Government, to superintend the work of the inspectors with reference to sanitary matters, report upon all questions of public health, and when necessary carry out any special inquiry entrusted to them.

The College, after much discussion, decided that it was inexpedient to deal with the question unsolicited, especially as the Fellows were not in a position to deal satisfactorily with the general question.

The arrangements for the formation of a Conjoint Examining Board for England were so far advanced that the College was asked to agree to the following bye-laws:—

1. The office of Representative of the Royal College of Physicians of London on the Committee of Reference for the Examining Board in England shall be an annual one.
2. The Council shall nominate four Fellows of the College whom they would recommend for election by the Fellows as representatives on the Committee of Reference for the Examining Board in England.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At the ordinary quarterly meeting of the College on the 25th inst., the following Member was admitted a Fellow:—

Wade, Willoughby Francis, M.B. Dub., Temple-row, Birmingham.

Also the following gentlemen were admitted Members:—

Cole, Thomas, M.D. Lond., Paragon, Bath.
Farquharson, Robert, M.D. Edin., Junior United Service Club.
Grigg, William C., M.D. Edin., Curzon-street, Mayfair.
Laking, Francis Henry, M.D. Heidelberg, Addison-road, Kensington.
Winslow, Henry Forbes, M.D. Lond., Sussex House, Hammersmith.

The following gentlemen were granted licences to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery:—

Allwood, John Philip, M.R.C.S., The Dispensary, Macclesfield.
Arthur, Joseph, M.R.C.S., Commercial-place, Commercial-road, E.
Boon, Alfred Pearl, M.R.C.S., St. Mary's Hospital.
Coltart, William Wilson. (Passed his examination in Medicine July 24, 1871, and has obtained a recognised qualification in Surgery.)
Domville, Edward James, M.R.C.S., Devon and Exeter Hospital.
Ewart, William, M.R.C.S., St. George's Hospital.
Harrison, Richd., M.R.C.S., Mabe House, St. Lawrence-rd., Notting-hill.
Lammiman, Cecil ed, M.R.C.S., Cannon-street-road.
Pitts, Henry Yate, M.R.C.S., Raikes House, Walton, Liverpool.
Roche, Eleazer Birch, M.R.C.S., St. Stephen's-road, Lewisham.
Young, Adam, M.R.C.S., Seamen's Hospital, Greenwich.

The following gentleman passed his Primary Professional Examination:—

Davis, Harry, University College Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Court of Examiners on the 23rd and 24th inst.:—

C. J. Davey, W. E. Dring, G. H. W. Thomas, and C. J. C. Mitchell, Guy's Hospital; B. R. Baker, W. B. Waller, and B. E. Bullen, St. Thomas's Hospital; B. Crawshaw and S. Wreford, London Hospital; F. J. Brennand and T. Coman, King's College; A. E. Williams and R. Bradley, Liverpool; H. H. Thomas, University College; W. M. Beaumont and J. A. Fothergill, Middlesex Hospital; J. Fryer, Leeds; I. M'Cammon, Canada and Guy's Hospital; W. M. James, Edinburgh; A. Arnold, Newcastle-on-Tyne; H. M. Maggs, Charing-cross Hospital; E. Knowles, Cambridge and St. Mary's Hospital; E. O. Bark, Bristol; A. Lingard, J. Black, S. A. Bernays, James Startin, W. Pocock, S. L. Smith, and C. M. Jones, St. Thomas's Hospital; H. G. Dyer, W. A. Carline, and P. Birch, King's College; G. C. A. Moir, J. J. Gawith, and H. E. Williams, St. Mary's Hospital; S. J. Hutchinson, A. Peck, and T. K. Rogers, University College; C. E. Winckworth, Guy's Hospital; H. Jackson and F. M. Williams, Middlesex Hospital; A. M. Cash and J. Dixon, Edinburgh; J. R. Postance, Liverpool; C. E. Smith, Manchester.

The subject for the Jacksonian Prize for the year 1873 is "Ununited Fractures." There having been no award of the Jacksonian Prize in 1871, the Council of the Royal College of Surgeons have directed that the dividends arising from the Jacksonian Fund during the past year should be invested and added to the principal of the fund.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 18th:—

Dudley, William Henry, Stafford.
Harrison, Richard, Kensington-park.
Roberts, William, St. Bartholomew's Hospital.
Sheldon, William, Wednesbury.
Thurland, Francis Edward, Thurstaston, Cheshire.
Triggs, John Bellhouse Bowden, Falmouth.
Withington, James Bissell, Woburn-place.

As Assistants in Compounding and Dispensing Medicines:—

Cole, Edward Henry, Leeds.
Cottam, William Procter, Launceston.
Dixon, John Self, Tunstall, Staffordshire.
Harrington, Arthur Lewis, Rochford, Essex.
Haworth, Benjamin Henry, Market Rasen.
Vince, James, Launceston.
Williams, William Griffith, Abergele.

On the same day the following gentlemen passed their First Professional Examination:—

Frederick Charles Hewett and Alfred Felix Stevens, St. Bartholomew's Hospital.

The Summer Registration at the Hall commences on the 1st and terminates on the 15th of May.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE.—The following gentlemen passed the primary examination for the licence in Medicine at meetings held during the present month:—

James I. Callcott; George Bowell, M.R.C.S.; Charles W. Wilson.

CARELESS ARSENICAL POISONING.—A child has been poisoned at Lincoln by an arsenical composition employed in sheep-washing. A piece of this substance had dropped from the pocket of one of the men, and fallen in pieces on the floor. The arsenic was found in the stomach by Dr. G. M. Lowe.

THE following gentlemen have lately received Government grants for successful vaccination:—Mr. James E. Peirce, Brynmawr, Crickhowell; Mr. J. G. Braden, of Lewes, Sussex; Mr. T. S. Hutchinson, medical officer for the third district of the Hollingbourn Union (second time); Mr. Nathaniel Crisp, of Swallowfield, near Reading (third time).

THE CONTAGIOUS DISEASES ACTS.—In the House of Commons on Monday, Mr. W. Fowler gave notice that on an early day he would ask leave to bring in a Bill to repeal the Contagious Diseases Acts. On Tuesday, Mr. Eykin presented a petition from twenty-one persons, subject to the provisions of these Acts, praying that nothing might be done to impair their efficiency.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—The twenty-fourth anniversary festival of this hospital was held on Tuesday at the London Tavern, when 300 guests sat down to dinner. Prince Arthur occupied the chair, and, in giving "The Prince and Princess of Wales," complimented the medical profession for the manner in which eminent members of it "had brought back his brother from the gates of death." Subscriptions were announced to the amount of £4700.

IN the case of Dr. C. B. Garrett (of Hastings) *v.* E. W. Pugin, a few days ago, in the County Court, the Judge made an order for the plaintiff, who claimed £49 17*s.* for scientific services rendered to the defendant, in addition to £10 already received. Costs were also allowed. The services consisted of various visits to Ramsgate and London in connexion with the Granville Baths, of various chemical experiments, and of a pamphlet written by Dr. Garrett.

Medical Appointments.

BODMAN, J. B., L.S.A.L., has been reappointed Medical Officer for the Bodman District of the Peterborough Union.

BUCKELL, G., M.R.C.S.E., has been appointed Medical Officer for the Leavening District of the Malton Union, Yorkshire, vice John Coates, M.R.C.S.E., deceased.

HARDING, G. D., M.R.C.S.E., has been appointed Surgeon to the Sheepbridge Iron Works Sick and Accident Society, Chesterfield, vice Chas. Booth, M.D., M.R.C.S.E., resigned.

HEAD, W. C., M.R.C.S.E., has been appointed House Surgeon and Secretary to the Beckett Hospital and Dispensary, Barnsley, vice E. Jeffery, M.R.C.S.E., resigned.

HORN, W., L.F.P. & S. Glas., L.M., has been appointed Surgeon to the Askam Iron and Steel Company, vice Geo. D. Harding, M.R.C.S.E., resigned.

KIRBY, Dr., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the North Division No. 2 of the Castlebar Dispensary District of the Castlebar Union, Co. Mayo, vice W. N. M'Dermott, L.K.Q.C.P.I., L.R.C.S.I., resigned.

LAMBIE, J., M.B., L.F.P. & S. Glas., has been appointed Medical Officer for the Islandshire District of the Berwick-upon-Tweed Union.

LEWIS, T., M.D., M.R.C.P.L., has been appointed Consulting Physician to the Carmarthenshire Infirmary, Carmarthen, on resigning as Physician.

M'GUIRE, E., L.K.Q.C.P.I., L.M., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Coog Dispensary District of the Ballinrobe Union, Co. Mayo, vice James E. Turner, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

MAUND, H., M.D., has been elected Medical Officer of Health for Sandown, Isle of Wight.

ORTON, E. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Bedworth District of the Foleshill Union, Warwickshire, vice F. Marshall, M.R.C.S.E., resigned.

PEARCE, W. H., M.R.C.S.E., has been appointed Resident House-Surgeon to the Rotherham Hospital and Dispensary, vice A. Hallam, M.R.C.S.E., resigned.

SCORESBY-JACKSON, T., M.B., C.M., L.M., M.R.C.S.E., Resident Surgeon at the West Bromwich District Hospital, has been appointed House-Surgeon to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary, vice E. W. Barton, L.R.C.P.L., M.R.C.S.E., resigned.

SHAW, C. W., L.K.Q.C.P.I., L.R.C.S.Ed., has been appointed Apothecary, Secretary, and Registrar to the Meath Infirmary, Navan, vice Wm. P. Timmon, L.A.H.Dub., deceased.

SKAE, F., M.D., has been appointed Medical Officer and Public Vaccinator for the Parishes of Delting and North Mavine, Shetland, vice M'Donald, resigned.

THOMPSON, H., M.R.C.S.E., has been appointed House-Physician to St. Bartholomew's Hospital.

VAWDREY, G., L.R.C.P.Ed., has been appointed Medical Officer for the Western District of the Redruth Union, Cornwall, vice G. Vawdrey, M.R.C.S.E., deceased.

WALSH, P. L., M.D., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Battevant Dispensary District of the Mallow Union, Co. Cork, vice J. P. Sheehan, M.D., L.R.C.S.Ed., resigned and superannuated.

WOODD, C. G., M.R.C.S.E., has been appointed Medical Officer to the Waterman's Asylum, Penge, Surrey, vice A. Hammond, M.R.C.S.E., deceased.

Births, Marriages, and Deaths.

BIRTHS.

ADAMS.—On the 23rd inst., at Barnes, Surrey, the wife of James Adams, M.D., of a son.

LONGMUIR.—On the 19th inst., at Bathgate, Linlithgowshire, the wife of J. Longmuir, M.D., of a daughter.

STONE.—On the 21st inst., at Oxford-terrace, Hyde-park, the wife of W. Domett Stone, M.D., F.R.C.S.E., of a son.

TINDALE.—On the 17th inst., at Hampton, Middlesex, the wife of W. R. Tindale, M.B., of a daughter.

WATSON.—On the 16th inst., at Tottenham, the wife of Wm. Tyndale Watson, M.D., of a daughter.

WINSLOW.—On the 16th inst., at Sussex House, Hammersmith, the wife of Dr. Lyttleton Winslow, of a son.

MARRIAGES.

BRAMWELL—CRIGHTON.—On the 20th inst., at the Parish Church, Tynemouth, Byrom Bramwell, M.B., eldest son of John Byrom Bramwell, M.D., of Dockwray-square, North Shields, to Martha, only daughter of the late Edwin Crighton, Esq., of Northumberland-square, North Shields.

EASBY—MARS.—On the 2nd inst., at Yarm, Dr. Easby, of Darlington, to Fanny, youngest daughter of the late Mr. Wm. Mars, of Yarm.

STONEY—BRIGGS.—On the 18th inst., at the Parish Church, Shepscombe, Gloucestershire, Percy Butler Stoney, M.R.C.S.E., of Holborn-hill, Cambe land, fifth son of James Butler Stoney, Esq., of Lonsdale-square, and Ross-y-Vera, Newport, Co. Mayo, Ireland, to Mary, fifth daughter of the late Thomas Briggs, H.E.I.C.S.

DEATHS.

BICKERTON.—On the 13th inst., at Mount-pleasant, Liverpool, Thomas Bickerton, Surgeon, aged 45.

BODEN.—On the 21st inst., at Smalley, near Derby, Robt. Boden, M.R.C.S.E., aged 74. Much regretted.

BROWN.—On the 21st. inst., S. W. Brown, F.R.C.S.E., of Lewisham, aged 65.

DILLON.—On the 17th inst., G. Dillon, M.D., of Bryanston-street, aged 79.

GORDON.—On the 19th inst., J. A. Gordon, F.R.C.P.L., F.R.S., of Pixholme, Dorking, aged 78.

NICHOLLS.—On the 23rd inst., at Knutsford, Cheshire, Thomas Francis Nicholls, M.D., L.R.C.P.Ed., L.R.C.S.Ed., aged 37. Friends will please accept this intimation.

VENABLES.—On the 18th inst., R. Venables, M.B., of Blackheath-hill, Physician to the Royal Kent Dispensary, H.P. Royal Artillery, aged 88.

WATSON.—On the 16th inst., R. M. Watson, M.R.C.S.E., of St. Jean d'Acre-terrace, Stoke, Devonport, aged 70.

Notes, Short Comments, and Answers to Correspondents.

THE DISCOVERY AT MENTONE OF A HUMAN SKELETON.

THE public journals have furnished a brief account of the discovery of a human skeleton, in a remarkable state of preservation, at Mentone by M. Rivière, who has been making an investigation of the natural history of the Ligurian coast under the authority of the French Government. Dr. J. Chalmers, of Islington, has received a note from a medical friend at Mentone regarding the occurrence; but until we possess more accurate information as to the condition of the skeleton, and its exact relation to the structures in which it was discovered, it would be premature to pronounce an opinion as to the scientific value and interest of the discovery, which may turn out to be great. The bone caves situated on the coast of the Italian frontier, known as the Grottes des Roches Rouges, with which most visitors to Mentone are acquainted, have long been noted for the evidence they have afforded regarding ancient European races of men and animals. With the exception of the ribs, the skeleton is said to be perfect. Numerous flint implements, shells, fragments of bone, &c., are stated to have been found about the skeleton, and they may serve to throw some light upon the domestic and other habits of the man, as well as to fix the period of his existence. We have instituted some inquiries into the subject, and it is very probable that a report will be furnished by M. Rivière and his *confrères*, the result of which we hope to lay before our readers hereafter.

THE letters of *Dr. Darcy* and *Mr. Fletcher Little* shall receive attention next week.

HAPPY INCIDENT OF A SEA VOYAGE.

To the Editor of THE LANCET.

SIR,—I beg to forward you the particulars of the following case, and should be glad, if you think them of sufficient interest, to have them recorded in your journal.

J. A. E——, a resident of the city of Mexico, retired to rest on the night of the 8th October, 1871, in his usual health. He awoke about two hours subsequently with intense dyspnœa, and acute pain on attempting to swallow. His wife immediately discovered to her great alarm that his false tooth and plate had disappeared; and attributing his sufferings to the impaction of this foreign body in the canal leading to the stomach, she sent apprising the medical attendant of the family of the fact, who on arrival proceeded to pass a probang, and declared after three successful introductions of the instrument that the offending tooth had passed into the stomach. Pain and difficulty of breathing still continued, and for three weeks the patient was dangerously ill with general inflammation of the throat, being unable to swallow anything more solid than milk or wine and egg beaten together. During this period he was leeched, purged, and cupped, and, as the patient himself expresses it, "he suffered many things at the hands of many medical men." Subsequently he was seen by the principal surgeons of the country, and had an instrument passed daily for a period of one month, but without relief. At length an operation was determined on; but the fee demanded being rather large (£2000), and the climate of Mexico not very favourable for operations, the gentleman determined to visit Paris and Nélaton, with whom he has a personal acquaintance. He came *viâ* Havana and New York on board the Cunard R.M.S. *Cuba* on the 27th ult., and was fortunate enough to get relief from his sufferings in the following way:—After recovering from an attack of sea-sickness he was extremely hungry from long starvation and the tonic influence of the sea air, and in sheer desperation he bolted a rather large piece of roast beef. This gave rise to very great distress and violent vomiting, resulting in the rejection of the beef, followed by a good quantity of blood, and presently, in another paroxysm, during which the patient was almost suffocated, the tooth and its plate complete came rattling into the basin, with a sound that was music to the ears of the nearly strangled man. Immediate and complete relief ensued, and the patient, attributing the happy issue to the good effects of roast beef, insisted on eating nothing else during the remainder of the voyage. I should not have believed in the possibility of its being impacted for nearly six months, and rejected in the manner it was, had I not myself witnessed it.

Your obedient servant,

Liverpool, April 13th, 1872. R. A. CALDWELL, R.M.S. *Cuba*.

Pauper can refuse to sign certificates of death if he thinks proper to do so; but we do not advocate the refusal, though we think the information ought to be paid for. Once registered, any person is entitled to a copy of the registry of death on payment of the fee.

L.S.A.—He is entitled to it, but cannot legally enforce payment. Registration is the only legal evidence of qualification.

THE CHEMISTRY OF WINE.

UNDER the above heading, *The Times* last week published a review of the elaborate book on Wine which has lately been given to the world by Drs. Thudichum and Dupré. The reviewer was very severe upon the messes now fabricated in France and Germany under the name of wine, and scarcely less so upon the chemists, who, "perhaps by reason of a professional love for artificial products," advocate the continuance and extension of the processes described. The article contains a general view of the chemical characters of pure wine, and, in reference to aldehyde, comes to the rescue of Greek wines from the imputations which Drs. Thudichum and Dupré have thrown upon them. It also contains a notable protest against a vulgar error about acidity in wines, pointing out that all pure and good wine, unsweetened and unbrandied, has a pleasant subacid freshness in its youth, and that this has no tendency to develop unwholesome acid in the stomach. The latter is mainly formed from the decomposition of artificial sweetening; and the consumer is told not to ask for wine that is not acid, but for wine that will not develop acid. The wines of Hungary and Greece are especially referred to as examples of what pure wine really is, and as the best resource for the consumer against the frauds now practised in the countries where the vineyards have obtained repute.

T. C. (Thetford) might apply to the Secretary of the institution at Bournemouth; but we are unable to say whether our correspondent could obtain admission under the conditions named by him.

MASTER AND SERVANTS (WAGES) BILL.

To the Editor of THE LANCET.

SIR,—In common with a large number of medical men in England and Scotland holding important public appointments, I felt much pleased with the truth and force of your remarks on the injurious, unwise, and uncalled-for meddling of the Master and Servants (Wages) Bill, should it pass into law in its present form.

Dr. Williamson has done good service by stating his case so plainly and so well; but of course, as you say, Dr. W.'s case is by no means exceptional. Having held public appointments for the last sixteen years, and having been appointed medical officer here within the last four years by the votes of the men and with the co-operation of the masters, I think myself qualified to give an opinion as to the present system of medical relief for workmen and their families.

The number of workmen employed in all the works here is over 1000, and I can most unhesitatingly say that the cordial and harmonious co-operation of masters, men, and medical officers is everything that one could desire. So pleased are the men, one and all of them, that an increase of the doctor's salary is contemplated.

I have no sympathy with the truck system whatever. At the same time I cannot help looking on the Master and Servants (Wages) Bill, in its present form, as a bold attempt to strangle a most beneficent system of medical relief, and a system which has been the means of doing much good to hundreds of thousands of workmen and their families.

I have joined the Local Association, have written to the M.P. of the district, and have written to the Parliamentary Committee of the British Medical Association. I would have all my professional brethren interested to go and do likewise, and that without delay. Co-operation and union is the only means by which the medical profession can ever hope to obtain that consideration which is its due.

As to parochial appointments and retiring allowances, I can see no reason why the medical men of Scotland should not be on equal footing with their brethren of England and Ireland.

Yours faithfully,

Thotts, N.B., April, 1872. JOHN CALDWELL.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to give my testimony as to the injurious effect which the passing of the Master and Servants (Wages) Bill will have on the interests of medical men in manufacturing districts.

In the large works with which I am connected there is a Sick Club which is maintained by a small weekly sum deducted from the wages of the workmen; but, owing to the large number of accidents, the fund thus obtained is found insufficient to meet the demands made upon it, and requires to be largely supplemented by the employers. In the same works there are two or three Sick Clubs maintained by the workmen themselves, and one of these Clubs, *although paying nothing for medical attendance*, has been bankrupt several times. Should this Bill become law, the former plan, which works well, would have to be abandoned, and the other Clubs at present in existence would be given to the lowest bidder at rates which would be utterly unremunerative. I am sure that this cannot be an isolated case.

Your obedient servant,

April, 1872. M.D., C.M.

LEPROSY.

OUR excellent contemporary, the *Indian Medical Gazette*, directs the attention of those interested in the investigation of this difficult subject to the Report of the Development and Progress of Leprosy among the Inhabitants of the Sandwich Islands, by Dr. Hillebrand, at page 131 of the *Indian Medical Gazette* for 1866. The reference may be useful to some of our readers.

Mr. E. Braithwaite.—Prof. Roscoe's Manual, published by Macmillan; but the student will find it the better plan to employ the Text-book used by the members of his class, and recommended by the professor whom he may be studying.

Q. P.—We know nothing of the author of the circular, which is not by any means a creditable production for a member of a learned profession.

Mr. William Marshall, (Ballaarat.)—We have no experience of the drug, and have not, we need hardly say, expressed an opinion in favour of its character or use.

"HOTEL KEEPERS AND DOCTORS; OR, I'LL TICKLE YOU, AND YOU'LL TICKLE ME."

THE above is the title of a letter sent us by *Mr. T. Colman, of* Brighton, complaining that he had been displaced in his attendance on a gentleman at the Ship Hotel, attacked with apoplexy, by Mr. Rugg, who was sent for first, but was not at home. The patient's friends had no particular knowledge of any medical man. The messenger sent for Mr. Rugg, reporting that he was not in, was asked to get any doctor he could find. Mr. Colman, being in the hotel on some other duty, was naturally requested to attend. Mr. Rugg, who it should be said is the medical attendant of the proprietor, claimed the case. Mr. Colman objected to give it up; but finally did so after something like a lecture from the proprietor of the hotel on medical ethics, chiefly in consideration of the friends. The essential question here is, Was the case to be regarded as Mr. Rugg's in the same sense as if it had been one of his ordinary patients, knowing him and preferring him, or as that of a stranger wanting any doctor that could be had in an emergency? In any place, this is an important question; but in a place like Brighton it is specially so. We are of opinion that, under the above circumstances, a medical man not at home to meet the emergency should not claim the case from another practitioner. It is right enough in the proprietor of an hotel, generally speaking, to recommend his own medical man; but it is too much to expect that such recommendations are to rule all emergencies. The case is totally different from that of a regular patient, or of a patient having a special wish to see a certain medical man.

Mr. Wm. Lyon.—We beg for the second time to assure our correspondent that his communication has been mislaid.

S. M. is desirous of ascertaining what are the chief ingredients in "Cropper's Gout and Rheumatic Mixture."

COLOUR-BLINDNESS IN DISEASE OF BRAIN AND OPTIC NERVES.

To the Editor of THE LANCET.

SIR,—The effect of certain diseases of the optic nerve and brain upon the faculty of colour-vision has recently attracted considerable attention amongst both surgeons and physicians who are interested in ophthalmic questions. My object in writing to you is to point out certain peculiarities I have myself observed in pursuing this question, with a view of finding out whether these facts have been remarked by others, and, if so, the interpretation that has been placed upon them.

A patient suffering from simple progressive atrophy of the optic nerves came under my observation some time ago. I tested his power of chromatic vision in the ordinary way with coloured letters, and found that he was quite incapable of distinguishing red or green. Having by frequent and varied experiments with differently coloured objects (books, &c.) confirmed this condition, I now proceeded to examine the effects of transmitted light upon his vision. My astonishment was very great when I found that colours which previously made no impression upon him were now readily recognised. Thus the patient was colour-blind as far as reflected light was concerned, but not so for transmitted light. Since that time I have not failed to submit all such cases to the double test of transmitted as well as reflected light, and on more than one occasion with the same result. I cannot help thinking that these observations, if carried out on a large scale, may help to throw some light upon a very obscure question, and may become a valuable aid to diagnosis. At all events I wish to call the attention of the profession to the necessity of examining all cases of colour-blindness with both transmitted and reflected light.

Yours, &c.,
Newcastle-on-Tyne, April 15th, 1872. C. S. JEAFFERSON.

Sewer.—Our correspondent cannot turn sewage into a stagnant or nearly stagnant piece of water without giving rise to offensive effluvia, particularly in hot weather. The quantity of solid matter deposited at the sewer outlet has nothing to do with it.

Assistant-Surgeon Royal Artillery, (India.)—The paper shall have our consideration. We do not remember to have seen the article in the *Indian Annals of Medical Science* alluded to by our correspondent.

THE communication of *Prof. Humphry* (Cambridge) has been received with thanks.

LIFE ASSURANCE.

To the Editor of THE LANCET.

SIR,—Under the above heading in your number of March 30th are some excellent remarks. With regard to the fees paid for medical reports, you say that every "Office in the kingdom pays these fees." I enclose you a communication from the London Life Association, having received the form for a medical report, on the back of which was a printed form, requesting me to fill up and forward the same. This was signed by my patient. As I thought this rather unusual, I wrote to the Office to inquire if they paid the usual fee, in reply to which I received the enclosed letter. Under such circumstances I refused to supply the required information, at the same time informing them that I would send their letter to THE LANCET, and ask for your opinion, as well as that of the profession, on the course I had pursued, and by which I may be guided in future.

I am, Sir, yours truly,
WM. WIGMORE, M.R.C.S. Eng.

Inverness-road, Bayswater, April, 1872.

London Life Association, 81, King William-street,
London, March 23rd, 1872.

DEAR SIR,—This being a mutual assurance society, and not a trading corporation, it requires every person desiring to be admitted to its advantages to furnish evidence that he is in good health, without expense to the Society; if he cannot do this he cannot be admitted.

Mr. ——, therefore, and not this Society, made application to you for a report, and the form in which that might conveniently be given was supplied to him to save trouble. Your application for a fee should, therefore, be made to him. I am, dear Sir, your obedient servant,

W. Wigmore, Esq. EDW. DOCKER, Secretary.

THE INFECTIOUS PROPERTIES OF "DENGUE."

AN account of the curious eruptive fever called "dengue," by Surgeon-Major Fletcher, Garrison-Surgeon, Cannamore, in the *Madras Medical Journal* for March, affords an excellent illustration of the infectious properties of this fever. The facts are these:—The steamship *Dalhousie* arrived at Cannamore from Bombay on the 2nd March with troops, women, and children. The troops landed on the day of arrival in good health; but almost immediately afterwards some of their number were attacked by dengue, which soon spread through them, four men only having escaped. The *Dalhousie* had been at Aden (where, it will be remembered, this fever had prevailed), and on her return voyage to Bombay the disease broke out among the crew (Lascars). At Bombay the vessel was cleaned and painted, but not disinfected. On her voyage to Cannamore the captain and officers of the ship and European part of the crew were attacked, and subsequently, as we have seen, the troops.

Dr. J. Chalmers.—Thanks. We have forwarded some inquiries to Mentone.

EXTRAORDINARY CASE OF HYPERLACTATION.

To the Editor of THE LANCET.

SIR,—If the history of the following case is of sufficient interest for your columns, I shall be glad if you will insert it.

Jane S——, aged twenty-five years, married, husband living, and who has been under my own observation for the last two years, was confined of her first and only child seven years since. She suckled the infant until it was a year old, and then weaned it; but instead of the secretion of milk, which was exceedingly profuse, stopping when the stimulus was removed, it has gone on ever since. She can milk her breasts at any time with the greatest ease, and make the fluid spurt out with considerable force. If she takes a cup of tea, or a glass of beer, &c., the breasts enlarge, and the fluid drains from her, and is a continual source of annoyance. Menstruation is pretty regular, profuse, and of a dark colour, and the secretion of milk at these periods is not so large or so rich in quality. Her general health is very good. At first she tried many means of getting rid of the secretion, but has given up all attempts lately in despair.—Yours obediently,

Gateshead, April 10th, 1872. F. W. NEWCOMBE, M.D.

Union Surgeon.—There is no specific fee mentioned for giving the certificate of lunacy in the case of a pauper. The justice or justices, who require the examination and certificate, may order the guardians to pay such reasonable remuneration as to them may seem proper. The usual fee is one guinea; but the guardians have sometimes made a special agreement to pay less, and have managed to get magistrates to agree to it.

Mr. D. E. Moore, (Bayswater.)—We really cannot forward private answers. Why does not our correspondent seek the advice of some respectable medical man?

WILL the *Curate of St. Matthew* (Bethnal-green) send us his name and address with reference to the communication with which he has favoured us?

A Poor-law Medical Officer of Seventeen Years' Standing, and only partially disabled, is not entitled to superannuation.

LOCOMOTOR ATAXY.

To the Editor of THE LANCET.

SIR,—I agree with Dr. Pollard that the effect of a remedy can seldom, *per se*, warrant a diagnosis, but it may aid us in arriving at one; and in enumerating the points of resemblance between his case and Dr. Lockhart Clarke's, that of similar results from a certain medicine was, I considered, worthy of mention. I am, Sir, yours truly,

D. HOOPER, M.B.,
April 23rd, 1872. Physician to the Surrey Dispensary.

Physiologist.—We have very little doubt as to the occasional existence of an unusual patency of the Fallopian tubes as alluded to by Dr. Matthews Duncan. There is a case described in the *Philadelphia Medical Times* for April 1st, in which the narrator of it believes that some alarming symptoms following the injection of cold water into the vagina were attributable to some of the fluid having been thrown into the uterus, and a portion of it having passed through the left Fallopian tube.

A CORRESPONDENT who asks us a question regarding the course pursued by a coroner is informed that, as he has put the case, the coroner was not justified in assuming the cause of death to have been otherwise than that stated in the medical certificate.

Mr. E. Chaffers.—As the case has already appeared in the pages of a contemporary, it would be contrary to our practice to publish it in our columns.

Mr. H. N. Hardy.—The question shall receive attention next week.

CHLORAL IN HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—In your issue of last week there is a report of a case of Hydrophobia cured by Hydrate of Chloral, by Mr. J. Sainter, of this town. This case was much discussed at the time in our local paper (the *Courier*), and, I believe, named in THE LANCET, asking for an explanation. May I ask Mr. Sainter if he is willing to give a more particular account of his case, and oblige by answering the following questions:—

1st. Is, or was, his patient a man of temperate habits?

2nd. Had his patient had a similar attack some years ago?

3rd. On the day of attack of said hydrophobic symptoms, had his patient been indulging *most freely* in the use or abuse of whisky?

On a reply to these questions I may have something to say on this case.

Yours respectfully,
Macclesfield, April 22nd, 1872. JOHN VAUX, M.D.

GUY'S HOSPITAL BIENNIAL FESTIVAL.

IN a short notice which appeared in our columns on March 23rd of this successful meeting, the name of Dr. Habershon, who presided at the dinner, was omitted by mistake. Dr. Habershon was well received and enthusiastically supported in the presidential chair, and it was by a mere oversight that his name as chairman was not mentioned.

A Practitioner may peruse Dr. Russell Reynolds' Lectures on the Clinical Uses of Electricity, published in a separate form by Messrs. Churchill, New Burlington-street.

L. A. P. should consult the Students' Number of THE LANCET, and apply by letter to the University of Paris.

Wise.—There can be no doubt as to the matter referred to; but we must decline to interfere. It is satisfactory to know that the attempt did not succeed.

Mr. Wm. Frost should carry the matter into a court of law.

EXTERNAL TREATMENT OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—In thinking over the suggestion of painting one half of the body with some material to limit the variolous eruption, it has appeared to me that by so doing one might give an increased impetus to the evolution, and more would thereby be developed on the uncovered side. In scarlatina or pyæmia one is scarcely able to control the outward manipulation by external applications. For my own part I have thought that the variolous eruption (its severity to a great extent) depends oftentimes on actinism. But let that be as it may, *elimination* in some form or other is now frequently regarded as salutary. I should almost think that if one could *limit* the reception of the poison and the *health* of the individual, the pustules might be smaller, and occupy less extent of surface.

I am, Sir, your obedient servant,

April 22nd, 1872. A. H. MORRILL.

Army Surgeon.—We have little doubt that something will be done; but whether it will be of a satisfactory nature is more than we can say. If our correspondent read his LANCET, he would have seen that we have long and steadily contended for limiting the tenure of the higher ranks. It would never do to fix a definite period of compulsory service for the rank of assistant-surgeon; but it would be open to no objection to have a period made as the maximum length of service in that grade.

Dr. J. Waring-Curran.—1. Certainly no man is bound to work for nothing. 2. We shall be happy to receive it.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Humphry, Cambridge; Sir Henry Thompson; Dr. Forbes Winslow; Mr. R. Barwell; Dr. Harrington Tuke; Dr. Letheby; Dr. J. Macpherson; Mr. E. Bluecowe; Prof. Brazier; Dr. Playfair; Mr. Tamplin; Mr. Wood; Mr. Bignell, jun.; Mr. Riley; Dr. Vaux, Macclesfield; Dr. Arnison, Newcastle-on-Tyne; Dr. J. Chalmers; Mr. Furner, Chepstow; Dr. Denham; Mr. R. Macrobin, Thirsk; Mr. Nash, Colchester; Dr. Peirce, Brynmawr; Mr. Braithwaite, Egremont; Mr. Mayor; Mr. Wallis, Chester; Mr. Marley, Nottingham; Mr. Pears, Burton-on-Trent; Mr. Gabb; Mr. Bramwell; Mr. Meymott, Ludlow; Dr. Wise; Mr. Wells; Mr. Currie; Dr. Hooper; Mr. G. Morton; Mr. Poole; Mr. Baines, Banbury; Mr. Morgan; Mr. Walter; Mr. Morrell, Cheltenham; Mr. Ramsden; Mr. A. Casella; Mr. Banbury; Mr. Marshall, Ballaarat; Messrs. Williams & Co., Boston, U.S.; Dr. Molony, Waterbeach; Mr. Mosse, Cape Coast Castle; Messrs. Young & Postans; Dr. Akerman; Mr. Morse; Mr. Hewson; Mr. Morley; Mr. Cookfield; Mr. Boyd, Whitehaven; Dr. Newcombe, Gateshead; Mr. G. Hammond; Mr. Lyon, Peterculter; Mr. Harding; Mr. Ellis; Mr. R. Thorn, Coventry; Mr. Bagster, Mr. Myles; Mr. Carleton, Llanelly; Mr. Elsie, Colchester; Mr. Greenway; Mr. Ticehurst; Mr. Fenton, Coventry; Dr. Gairdner, Glasgow; Mr. Stoney; Mr. Gerald, Folkestone; Mr. Crawford; Mr. Loeming; Dr. Lister, Ashton; Surgeon-Major Atchison; Mr. Blackett; Dr. Holland; Dr. Hawkes, Hanwell; Mr. Downe; Mr. Chater; Mr. Wallis; Dr. Moore; Mr. Hemming; Dr. Chalfers, Keighley; Mr. Watts, Merthyr Tydfil; Dr. Major, Hungerford; Mr. Gregory; Dr. Davies; Mr. Goode; Mr. T. O. Walker, Edgbaston; Mr. Wilton; Mr. T. Graham, Wolverhampton; Mr. Watts; Mr. Stanfield; Dr. de Styrap, Shrewsbury; Mr. Hall, Seetapore, Oudh; Mr. J. Leonard, Eastbourne; Mr. Walsh, Foxley; Mr. Melton, Douglas; Dr. Prosser James; Mr. Brown, Halifax; Dr. Adams, Barnes; Mr. Heathcote, Shrewsbury; Dr. Schaller, Hamburg; Mr. Capman, Oakham; Mr. H. Rose; Mr. Dewey, Forres; Mr. Hutchinson; Mr. Ellis; Mr. Josephs, Stroud; Mr. Wheeler, Rochford; Mr. Walters, Pinchley; Mr. Davis; Messrs. Lippincott, Philadelphia; Mr. Norman, Plymouth; Mr. Kelsey, Bristol; Mr. T. Thomas, Pocklington; Dr. Moses, Wolverhampton; Mr. Hordley; Mr. Andrews; Mr. Porter, Caterham; Mr. Ryan, Leicester; Mrs. A. Lewis; Mr. Hawkins, Chatteris; Mr. Taylor, Llandudno; Mr. Colman; Mr. Esthy; Mr. Norris, Chester; Mr. Chambers; Mr. A. Cruger; A Militia Surgeon; G. R. J.; Royal Microscopical Society; The Curate of St. Matthews, Bethnal Green; Pauper S. M.; J. M. A.; L. A. F.; G. W.; Union Surgeon; The Secretary of the London Institution; Probe; An Old Reader; J. C.; M.D., C.M.; One taken in; L.S.A.; &c. &c.

Melbourne Argus, Bendigo Independent, Dublin Evening Mail, Parochial Critic, Retford News, Midland Counties Express, Guisborough Exchange, Australian Medical Journal, Le Bordeaux Medical, Clinic (Cincinnati), *Geelong Advertiser, Annales de Dermatologie, Western Mail, Lincoln Journal, Kent Coast Times, Scarborough Express, Runcorn Guardian, Tavistock Gazette, Metropolitan, Bolton Evening News, East London Observer, Birmingham Morning News, Rugby Advertiser,* and *Irish Times* have been received.

Medical Diary of the Week.

Monday, April 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Last ordinary meeting of the 99th session.—Dr. Sansom: Some new American preparations derived from Petroleum.—Dr. Semple: Specimen and Case of Disease of Right portion of Heart.—Dr. Chapman, "On the Treatment of Diabetes."—Mr. Thomas Bryant (President), "On Skin-grafting."

Tuesday, April 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Edward B. Tylor, "On the Development of Belief and Custom amongst the Lower Races of Mankind."

Wednesday, May 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M
GREAT NORTHERN HOSPITAL.—Operations, 3 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Annual Meeting.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Newman, "On a Case of Delivery per Vias Naturales, in which the Cæsarean Section had formerly been performed."—Dr. Squarey, "On the Cases of three Sisters in whom the Uterus and Ovaries were absent."—Dr. Braxton Hicks, "On the Structure of the Human Placenta."—And other papers.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M.

Thursday, May 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat and Light."

Friday, May 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—9 P.M. Dr. Wm. Spottiswoode, "On Optical Phenomena produced by Crystals when submitted to Circularly Polarized Light."

Saturday, May 4.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. A. Proctor, "On the Star-Depths."

NOTICE TO SUBSCRIBERS.

POST OFFICE NOTICE.—The following notice has been issued from the General Post Office, dated the 8th inst.:—"As a large number of newspapers addressed to places abroad, prepaid only with a single rate of postage, although exceeding four ounces in weight, continue to be posted in all parts of the United Kingdom, it is necessary again to remind publishers, newsvendors, and the public generally, that every newspaper intended for transmission through the post to any foreign country or British colony is liable to a separate rate of postage for every four ounces or fraction of four ounces, and that if this postage be not fully prepaid the newspaper cannot be sent forward."

*** In calling attention to the above paragraph, the Publisher would remind subscribers purchasing copies of THE LANCET for transmission abroad that the Foreign Edition printed upon thin paper is under four ounces in weight, and should in all cases be asked for from the news-agents.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£2	12	0
For every additional line.....	0	0	6	For a page	5	0	0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.